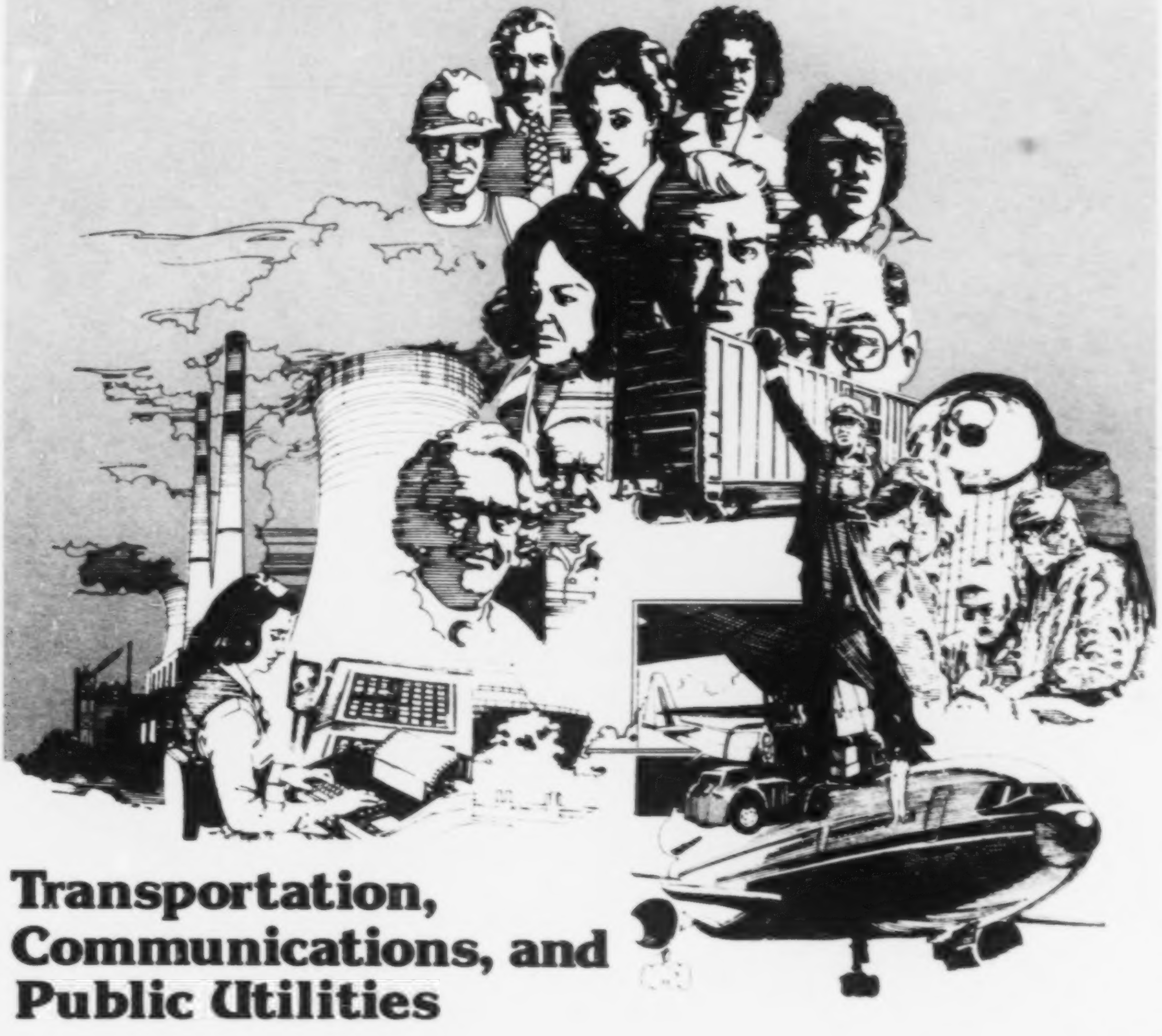
10/17/84 S0465-2.13(11) A

JULY 1984

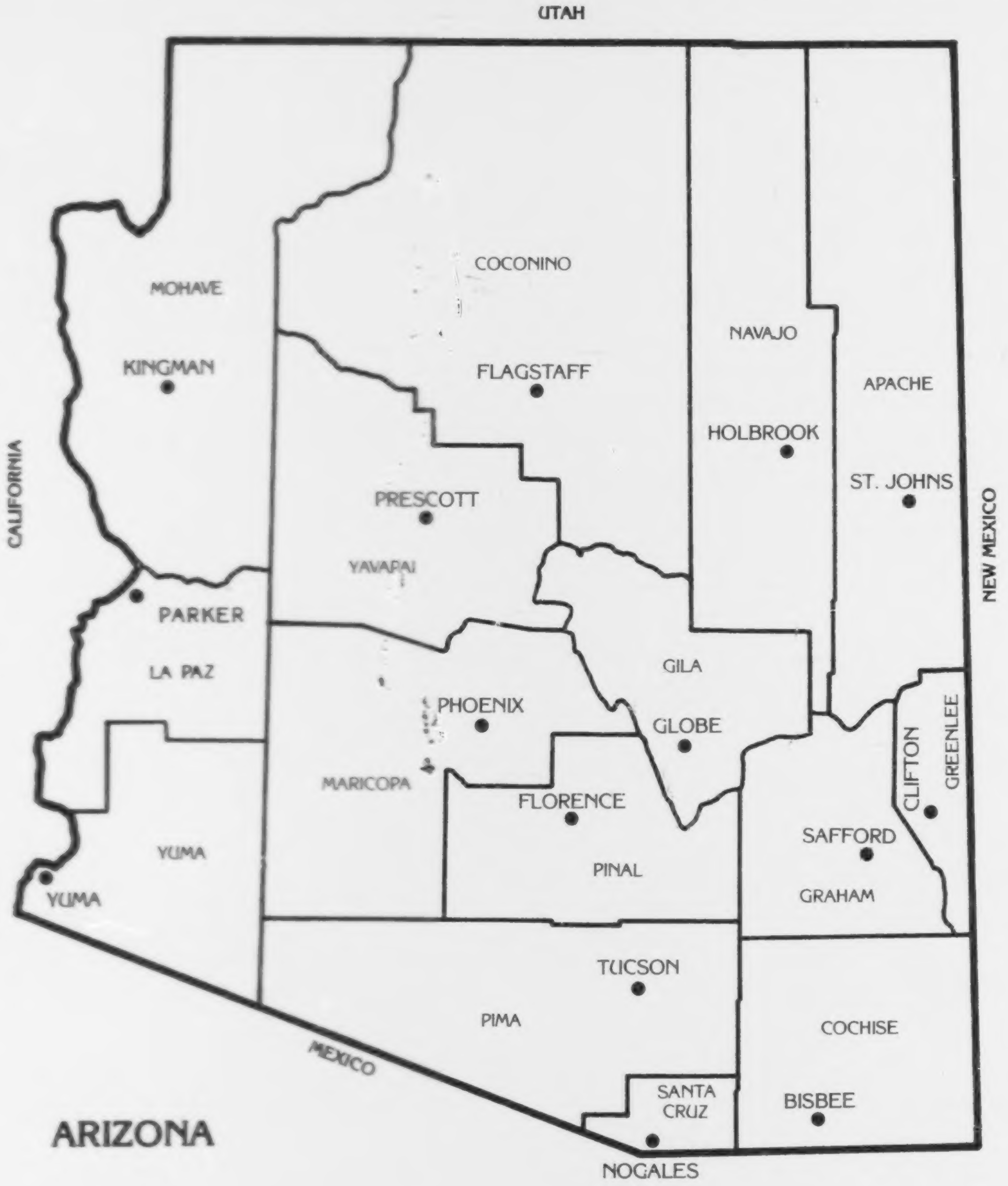
DES-5140 (7-84)

Arizona Occupational Profile

A Labor Market Information Publication
of the Department of Economic Security



Transportation, Communications, and Public Utilities


UTAH
CALIFORNIA
NEW MEXICO
MEXICO
MOHAVE
KINGMAN
COCONINO
FLAGSTAFF
NAVAJO
HOLBROOK
APACHE
ST. JOHNS
PRESCOTT
YAVAPAI
PARKER
LA PAZ
GILA
GLOBE
PHOENIX
MARICOPA
FLORENCE
PINAL
CLIFTON
GREENLEE
SAFFORD
GRAHAM
YUMA
YUMA
TUCSON
PIMA
COCHISE
SANTA CRUZ
BISBEE
NOGALES
ARIZONA

OCCUPATIONAL PROFILE

The value of current and accurate occupational employment information has long been recognized by job seekers, public and private administrators, and those involved in training, recruiting, and counseling. A major source of this information in Arizona is the Occupational Employment Statistics (OES) Program - a cooperative effort between Arizona and the U. S. Bureau of Labor Statistics.

This Occupational Profile is one in a series of publications produced from information developed by the Occupational Employment Statistics survey. These publications represent one of several occupational employment information delivery systems incorporating OES survey data. The survey is used to collect employment data, by county, for over 1,000 occupations in Arizona. From these surveys, which require the cooperation of the Arizona business community, current employment in the various occupations is determined, and from this an occupational outlook is formulated. The Occupational Profiles contain the survey findings and examine, individually, the industries of Arizona.

Surveyed industries include:

- Mining
- Construction
- Manufacturing
- Transportation, Communications, and Public Utilities
- Trade
- Finance, Insurance, and Real Estate
- Services
- Government

For further information, or to comment on any aspect of this program, please write to the address on the back cover.

INDUSTRY INFORMATION

INDUSTRY DEFINITION

The industry division designated as transportation, communication, and public utilities includes establishments providing passenger and freight transportation, communication services, and electricity, gas, steam, water, or sanitary services.

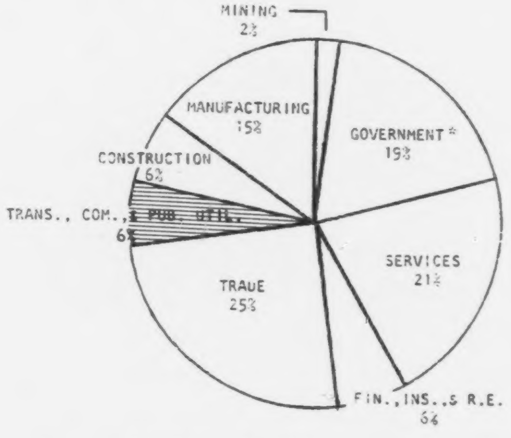
A detailed description of these industries is found in the Standard Industrial Classification (SIC) Manual[1] under codes 40 through 49. Employment data for the U. S. Postal Service (SIC code 43) is not included in this publication. In addition, the occupational data includes certain services rendered by state and local governments, e.g., irrigation and fire-protection.

Often referred to as the regulated industries, transportation, communications, and public utilities are grouped together because they provide a public service and are often owned or regulated by public agencies. The regulations vary from industry to industry, but, in general, their goals are to ensure fair prices and to see that the public interest is served.

INDUSTRY CHARACTERISTICS

Employing approximately 56,000 in 1982, the transportation, communication, and public utilities (TCPU) industry accounts for about 6 percent of Arizona's 1 million workers. Employment in transportation services totals more than 24,000, while those working in the public utilities and communication industries number 19,000 and 18,000, respectively.

FIGURE 1: ARIZONA NONAGRICULTURAL EMPLOYMENT, 1982



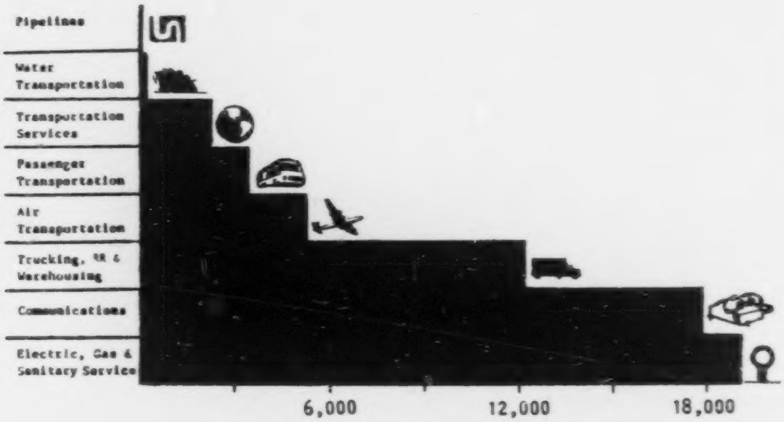
* includes education

---

[1] Office of management and Budget, *Standard Industrial Classification Manual, 1972 Edition*, pp. 219-239.

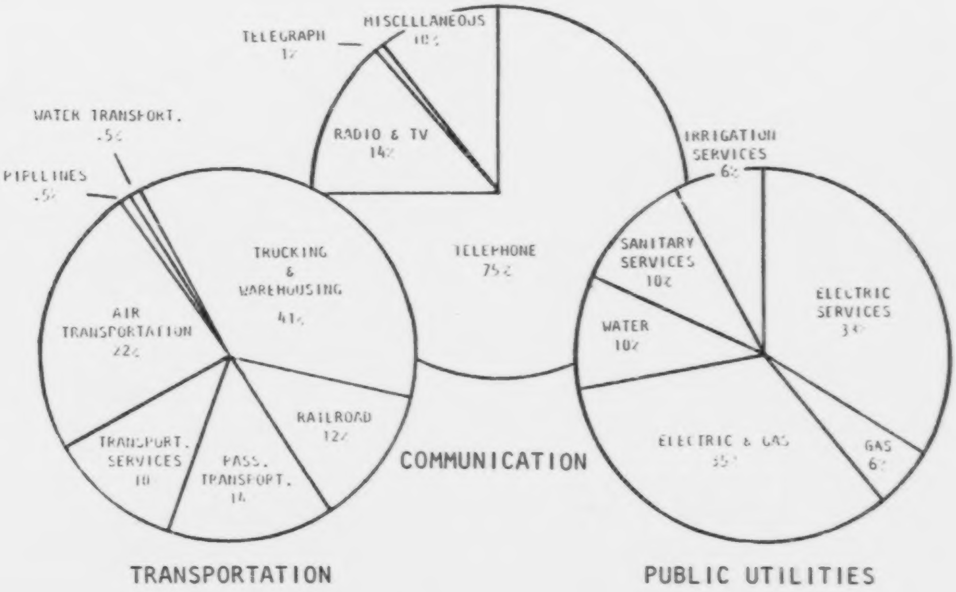
Predominant in the transportation industry are truckers who account for forty percent of the sector's employment. At the other extreme are pipeline workers transporting coal slurry or petroleum, and water transportation workers, many of whom provide sightseeing and river running trips and excursions on the Colorado River.

FIGURE 2: TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES (TCPU) EMPLOYMENT IN ARIZONA, 1982



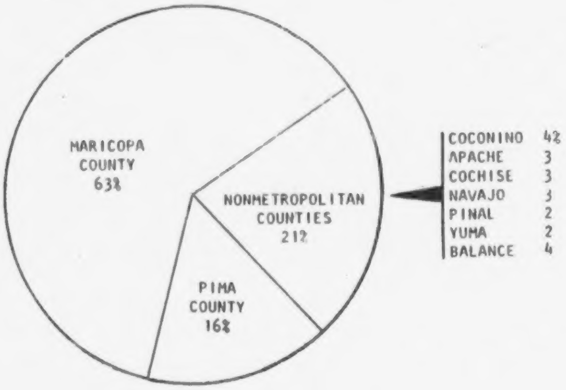
The public utilities sector includes providers of water, electric, gas, and sanitary services. Three of every four workers in this category are involved in the production and distribution of energy. The remainder is divided among water, sanitary, and irrigation services.

FIGURE 3: EMPLOYMENT DISTRIBUTION WITHIN TCPU, 1982



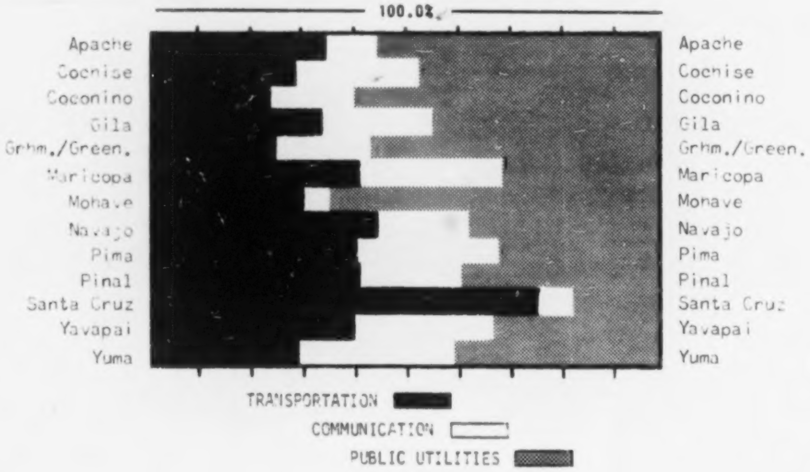
Geographically, nearly two-thirds of Arizona's TCPU employment is located in Maricopa County where communication and transportation services are concentrated. Seventy percent of the state's communication employees and 75 percent of the airline and trucking industry employment are located in the Phoenix metropolitan area. In addition to requiring the services of these industries to satisfy the needs of its population, the state's major population center is also the administrative center for many of the industry's firms.

FIGURE 4: GEOGRAPHIC DISTRIBUTION OF TCPU EMPLOYMENT



TCPU employment in several of the nonmetropolitan counties is dominated by public utilities as indicated by the following graph. Power generating plants in Apache, Coconino, and Navajo Counties and relatively small transportation and communication components in Mohave County account for this profile. Dominant in Santa Cruz County is the transportation sector whose employees are primarily truck drivers who service the trade center of Nogales on the U. S. - Mexico border.

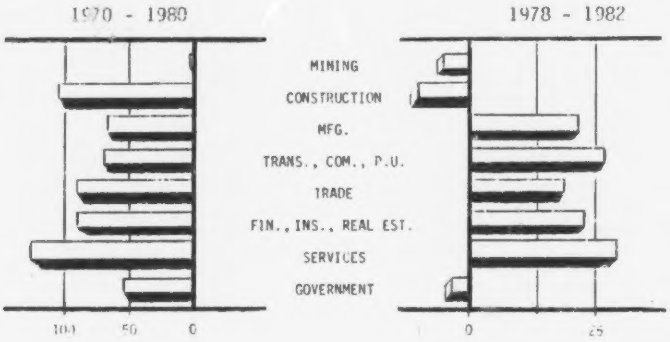
FIGURE 5: DISTRIBUTION OF TCPU IN ARIZONA'S COUNTIES



INDUSTRY TRENDS

Characterized by consistent and predictable growth as it responds to the needs of a growing population and an expanding economy, employment in TCPU increased by more than 70 percent during the decade of the 70s. Although falling short of the average growth rate for all industries, TCPU boasts a year-to-year consistency unmatched by any other major industry division. Even during the most recent recession, TCPU managed a 10 percent employment increase for the period 1980-1982, while the change for all Arizona industry was a mere 1.5 percent.

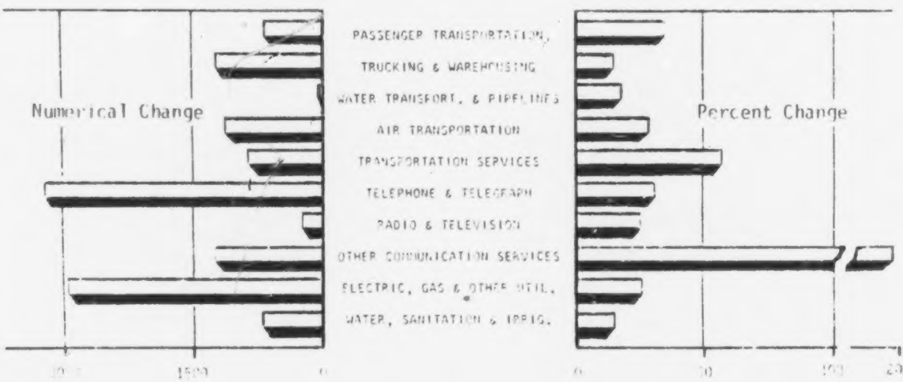
FIGURE 6: EMPLOYMENT CHANGE IN ARIZONA'S INDUSTRIES (PERCENT)



Since 1970, both the communication and public utilities industries have doubled their employment while the transportation sector has expanded about 65 percent. In recent years, the communication industry has created about 1,250 new jobs annually as compared to about 1,050 in transportation services and 925 in the public utilities.

Examination of TCPU employment data at a more detailed level reveals that miscellaneous communication services have grown the fastest since 1978. Led by the youthful pay-TV industry, employment in this catch-all category increased nearly 200 percent during the period.

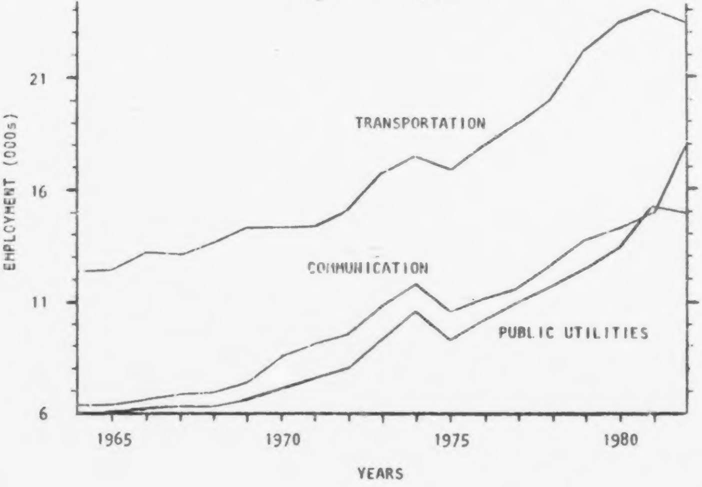
FIGURE 7: EMPLOYMENT CHANGE IN TCPU, 1978 - 1982



The communication industry will continue to experience strong growth through the 1980s. Because of technological achievements, however, employment expansion will likely not be as great as might be suggested by the ever-increasing variety of available communication services and the number of subscribers to these services. More assured, though, is the dynamic era that the communication industry has already entered. The structure of the telephone industry, for example, is changing as a result of competition, regulatory reform and the application of new technology. The traditional common carriers are competing with non-regulated computer and interconnect companies, specialized carriers, and domestic satellite companies.

During the decade, data communications will grow faster than the traditional voice services. Digital electronic switching, satellite communications, local data networks, and fiber-optic transmission are paving the way for a variety of new data communication services, such as electronic mail, on-line information systems, and many high-speed business communication services. As business offices become more automated, data transmissions will obviously grow.

FIGURE 8: EMPLOYMENT IN TCPU
1964 - 1982

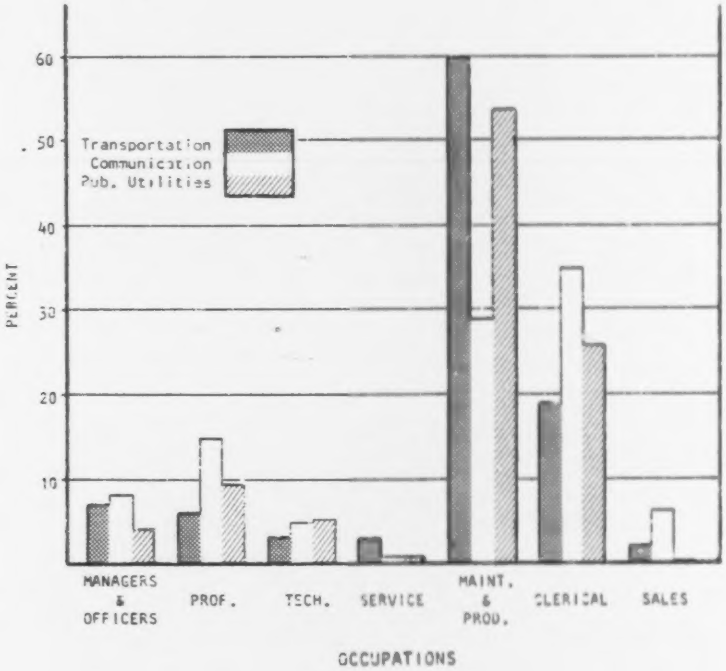


A similar restructuring is also taking place in television and radio broadcasting. Challenging the dominance of network programming is subscription TV and other services brought about, to a large degree, by significant technical advances made during recent years. With the advent of communications satellites, cable television has realized significantly increased viewership. In the wings are other program distribution systems vying for acceptance in this rapidly changing arena. One of these is the multiple distribution service (MDS) which relays TV signals from a central station to receivers installed in hotels, office buildings and individual residences. And then there is the direct broadcast satellite service (DBS) which, as currently conceived, would relay signals directly to receivers of individual subscribers in the home or workplace.

OCCUPATIONAL INFORMATION

Maintenance and production workers dominate employment in transportation, communications, and public utilities. This dominance reflects the many truck drivers in the transportation industry and the maintenance and craftworkers in the public utilities sector. The largest single occupation in TCPU is, in fact, tractor trailor truck drivers with employment of nearly 3,000. Other prominent occupations in this diverse occupation group are bus drivers, delivery and route workers, maintenance repairers, and line installers.

FIGURE 9: MAJOR OCCUPATIONAL CATEGORIES
IN TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES, 1982



Clerical workers represent the second largest occupational group with employment of 16,000. Especially concentrated in firms providing communication services, clerical workers are common to all industries, and, for this reason, employment of general office clerks trails only tractor-trailer drivers in total employment. Also numerically prominent in the communication industry are central office operators (switchboard operators) and customer service representatives - further contributing to the size of the clerical category.

Trailing clerical workers in employment are professionals with 8 percent of the industry's employment. Most numerous in this category are travel agents and/or accomodations appraisers, electrical and electronic engineers, and radio and TV announcers.

The occupational distribution of Arizona's TCPU employment, as shown in figure 9, is consistent with the State's two major metropolitan areas. However, with fewer regional offices and administrative complexes, the "balance of state" or nonmetropolitan counties employ a significantly greater number of maintenance and production workers and fewer clerical personnel.

FIGURE 10: OCCUPATIONS MOST FREQUENTLY REPORTED IN TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

Occupations	Estimated 1982 Employment	Percent of Sector Total
TRANSPORTATION		
Tractor Trailor Truck Drivers	2,936	12.6%
Managers & Officers	1,674	7.2
Bus Drivers	1,420	6.1
Travel Agents/Accomodation Appr.	1,068	4.6
Delivery & Route Workers	1,043	4.5
Truck Drivers, Heavy	1,013	4.4
Ticket Agents	758	3.3
General Office Clerks	709	3.0
Line Service Attendants	597	2.6
Aircraft Mechanics	574	2.5
COMMUNICATION		
Managers & Officers	1,759	10.0%
Customer Service Representative	1,020	6.0
Central Office Operators	863	5.1
General Office Clerks	674	4.0
Supervisors, Nonworking	582	3.4
Central Office Repairers	555	3.3
Directory Asssistance Operators	538	3.2
Electrical & Electronic Engineers	520	3.1
Station Installers	503	3.0
Announcers	490	2.9
PUBLIC UTILITIES		
Line Installers/Repairers	695	4.8%
Supervisors, Nonworking	658	4.5
Managers & Officers	613	4.2
General Office Clerks	538	3.7
Maintenance Repairers, General Ut.	485	3.4
Meter Readers, Utilities	463	3.2
Secretaries	457	3.2
Customer Service Representatives	448	3.1
Trades Helpers	409	2.8
Electrical & Electronic Engineers	373	2.6

Employment in each of the seven major occupational classes will continue to expand - although at different rates. Professional and technical occupations will see their share of total industry employment increase the most, while clerical workers and laborers will likely lose.

Although its share is decreasing, clerical workers will provide many employment opportunities to job seekers. In addition to openings resulting from growth, turnover is relatively high in most clerical occupations and many openings will result from occupational transfers and departures from the labor force. General office clerks, the most numerically significant clerical occupation, will realize nearly 5,000 job openings during the projection period - 1,600 due to growth and the remainder due to labor force separation.

Nationally, employment of central office operators has established a pattern of declines that began more than 25 years ago. In Arizona, increased service demand will somewhat offset reduced labor requirements brought about by a variety of technological innovations. To the public, one obvious manifestation of these innovations is the increasing use of computer-assembled speech.

Contributing to the demand for switchboard operators are new and expanding businesses and organizations that employ private branch exchange (PBX) switchboard operators to handle internal incoming and outgoing calls.

Two occupations comprise about 50 percent of the employment in the professional workers category. Engineers and travel agents and/or accomodations appraisers account for 2,000 of the industry's 4,000 professionals. Although sensitive to economic conditions, employment of travel agents will expand more rapidly than the average for all occupations - providing 300 job opportunities through 1986. A result of expanded business activity, rising incomes, and a greater emphasis on leisure activities, more people are traveling more frequently than in the past and creating a demand for transportation service workers.

Representing the largest professional occupation and underlying the increasing share of professional and technical workers in Arizona's TCPU industry is the number of workers with engineering skills. Contributing to this evolution is the introduction of nuclear power generation in Arizona. According to the Bureau of Labor Statistics, nearly half of the nations's nuclear industry workforce are engineers, scientists and technicians. Marlene Shelton, Employment Supervisor at Arizona Public Service, forsees a heightened demand for electrical engineers with power-generation experience and for nuclear engineers - nearly all of which are recruited from other areas of the country that have nuclear power plants.

FIGURE 11: OCCUPATIONS WITH THE GREATEST NUMBER OF OPENINGS IN TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

Occupations	Job Opportunities (Exc. Turnover) 1982-1986
TRANSPORTATION	
Tractor Trailor Truck Drivers	743
Manager & Officers	513
Bus Drivers	372
Travel Agents	321
General Office Clerks	256
Delivery & Route Workers	252
Truck Drivers, Heavy	248
Ticket Agents	228
Line Service Attendants	176
Flight Attendants	166
COMMUNICATION	
Managers & Officers	379
Central Office Operators	296
Customer Service Representatives	294
General Office Clerks	195
Directory Assistance Operators	183
Typists	147
Supervisors, Nonworking	107
Statistical Clerks	102
Central Office Repairers	86
Sales Reps., Agents, and/or Assoc.	85
PUBLIC UTILITIES	
General Office Clerks	156
Secretaries	137
Managers & Officers	133
Customer Service Representatives	129
Supervisors, Nonworking	124
Line Installers/Repairers	92
Maintenance Repairers, General Util.	81
Trades Helpers	77
Meter Readers, utilities	66
Electricians	58

Other activities in electric power generation that require engineering skills include research and development, system planning, design, construction and installation, system operation and maintenance and test engineering.

In the communication industry, engineers plan cable and microwave routes, central office and PBX equipment installations, and communication systems for new buildings, as well as engage in the development of new equipment.

Maintenance and production occupations, the largest occupational group, will provide an estimated 5,500 job openings through 1986. One-fourth of these openings will be for truck drivers, with the greatest portion of these for tractor-trailor drivers. However, those who haul locally will see their numbers increase more rapidly than long-distance haulers. Anticipated growth in business activity will result in more freight to be distributed and since trucks carry virtually all local freight, employment of these drivers is expected to increase substantially.

As in other industries, employment increases created by a growing demand for services are being tempered by development of more efficient equipment and procedures. These dynamics are particularly evident in maintenance and production occupations, where technological innovation is bringing greater productivity.

FIGURE 12: OCCUPATIONS WITH THE GREATEST EMPLOYMENT IN TRANSPORTATION, COMMUNICATIONS, AND PUBLIC UTILITIES

	Employment 1982	Job Openings* 1982-1986
Managers and Officers	4,047	1,029
Tractor-Trailer Truck Drivers	2,944	745
General Office Clerks	1,921	610
Supervisors, Nonworking	1,704	364
Customer Service Representatives	1,468	424
Bus Drivers	1,420	372
Travel Agts. and/or Accomodations Appraisers	1,068	322
Delivery and Route Workers	1,050	254
Truck Drivers, Heavy	1,013	248
Electrical and Electronic Engineers	896	119
Central Office Operators	863	297
Secretaries	771	256
Maintenance Repairers, General Utility	768	159
Ticket Agents	765	230
Line Installers/Repairers	757	101
Accounting Clerks	707	222
Clerical Supervisors, Office or Plant	598	131
Line-Service Attendants	597	176
Dispatchers, Vehicle, Service or Work	593	140
Mechanics, Aircraft	574	108
Trades Helpers	562	112
Central Office Repairers	555	86
Typists	546	184
Directory Assistance Operators	538	183
Stock Clerks, Stockroom, Warehouse or Storage	538	119
Diesel Mechanics (Exc. Auto & Engineer Equip.)	518	121
Station Installers	503	66
Announcers	490	72
Sales Reps., Agents and/or Associates	475	101
Installer, Repairer, and/or Section Maintainers	465	61
Meter Readers, Utilities	463	66
Truck Driver Helpers	444	129
Electrical and Electronic Technicians	436	58
Electricians	434	78
Mechanics, Automotive	381	79

*Does not include turnover.

Yet to be significantly exploited are the nonentertainment uses of cable systems, such as for two-way communications, data bank access, and alarm systems. Currently focusing on the public's hunger for entertainment and sports programming, the industry will undoubtedly respond to any adequate market demand for these ancillary services.

Dominated by employment in motor freight services, the transportation industry will respond to the requirements of the state's expanding economy and the heightened profile of Phoenix and Tucson as regional trade and manufacturing centers. Although the verdict is not yet in on the effects of recent national and local trucking deregulation, employment in the industry is to a great degree affected by the health of the national economy. Although the trend is for a moderate growth rate through 1986, it will not be without periodic variation. Likewise, the air traffic industry will react to the cyclical swings of the economy. In the long run, however, expected growth in airline passenger and cargo traffic will more than balance out the potential impact of advanced communications systems that may limit growth in business travel by corporate executives. Employment in Arizona's airline industry will continue to benefit from the passage of the Airline Deregulation Act of 1978 which sent carriers scrambling to expand services on lucrative Sunbelt routes. Phoenix Sky Harbor International Airport, for example, is currently served by 20 carriers, as compared to eight in 1978.

Employment growth in utilities relates primarily to increasing consumption of electricity, gas, and water. Reflecting the industry's capital-intensive nature, however, output and productivity increases will not be matched by employment increases of the same magnitude. For example, due to the use of automatic controls and larger, more efficient equipment, employment will not increase as fast as electric power production. Similarly, the Palo Verde Nuclear Generating Station will generate more power, yet employ comparatively fewer people than older power plants. Still, the Palo Verde nuclear power plant, located 40 miles southwest of Phoenix, will have a profound effect on local public utility employment. Scheduled for operational status in late 1985, the first unit is expected to be followed by an additional start-up in each of the following two years.

OCCUPATIONAL STRUCTURE

The following tables provide employment estimates and projected employment and job openings for the counties and the state. A table for La Paz County is not included as the survey was conducted prior to this county's creation.

When using the data, please note the following:

1) The data reflect full and part-time wage and salary employment only, and do not include self-employed or unpaid family workers.

2) "Total Job Openings" represents the number of openings due to growth of the industry and separations from the labor force. They do not account for labor turnover, i.e., openings created when a worker changes jobs, leaving the job to be filled by someone else. These vacancies are often the largest source of job openings.

3) The projection technique does not possess the degree of accuracy that may be implied by small employment and demand figures.

4) To eliminate the possible disclosure of confidential employer information, occupations have been added to the appropriate "all other" or residual category if: less than three firms reported a single occupation; one firm reported more than 50 percent of the occupational estimate; two firms combined reported more than 75 percent of the occupational estimate. In certain cases, releases have been obtained from large employers to waive the confidentiality criteria.

5) Not reflected in the tables is the employment impact created by the start-up of a major power plant in Apache County expected to employ approximately 400 in 1986.

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

STATEWIDE

	Estimated 1982 Employment	Percent of Total 1982 Employment	Projected 1986 Employment	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	4,078	7.5	4,522	1,034
Managers & Officers	4,047	7.5	4,489	1,029
Pilots, Ship	16	.0	17	2
All Other Managers	15	.0	16	3
TOTAL PROFESSIONAL WORKERS	4,538	8.3	4,984	937
Chemical Engineers	10	.0	11	1
Civil Engineers	83	.2	91	19
Electrical & Electronic Engineers	896	1.6	962	119
Industrial Engineers	16	.0	18	3
Mechanical Engineers	110	.2	118	15
All Other Engineers	164	.3	176	25
Natural & Mathematical Scientists	47	.1	51	11
All Other Natural & Mathematical Scientists	6	.0	8	2
Systems Analysts, Electronic Data Processing	180	.3	194	22
Teachers, Vocational Education or Training	13	.0	16	5
Photographers	68	.1	73	12
Television Camera Operators	80	.2	86	12
Purchasing Agents &/or Buyers	79	.1	87	18
Accountants & Auditors	279	.5	305	68
Announcers	490	.9	527	72
Broadcast News Analysts	117	.2	126	17
Commercial Artists	25	.1	27	6
Writers &/or Editors	107	.2	115	27
Film Editors	29	.1	31	7
Lawyers	33	.1	36	6
Librarians, Professional	14	.0	15	4
Personnel & Labor Relations Specialists	177	.3	192	36
Public Relations Practitioners	13	.0	14	3
Reporters &/or Correspondents	130	.2	140	33
Right-of-Way Agents	46	.1	49	9
Technical Directors	37	.1	40	5
Travel Agents &/or Accommodations Appraisers	1,068	2.0	1,229	322
All Other Professional Workers	221	.4	247	58
TOTAL TECHNICAL WORKERS	2,236	4.1	2,462	467
Computer Programmers	176	.3	194	27
Drafters	182	.4	196	28
Electrical & Electronic Technicians	436	.8	469	58
Surveyors (Excl. Surveyor Helpers)	33	.1	36	5
Mechanical Engineering Technicians	6	.0	6	1
Video Recording Engineers	9	.0	10	1
Broadcast Technicians	175	.3	188	23
Estimators & Drafters, Utilities	170	.3	182	26
All Other Engineering Technicians	334	.6	359	61
All Other Science Technicians	3	.0	3	1
Airplane Pilots	372	.7	437	87
Radio Operators	25	.1	29	7
Emergency Med. Techs. (Excl. Ambulance Attends.)	135	.2	156	107
All Other Technicians	180	.3	197	35
TOTAL SERVICE WORKERS	953	1.7	1,112	337
Janitors, Porters & Cleaners	221	.4	246	66
Guards & Doorkeepers	76	.1	86	14
Food Service Workers (Exclude Cashiers)	38	.1	40	9
All Other Food Service Workers	3	.0	4	1
Flight Attendants	328	.6	397	165
Supervisors, Nonworking - Service	44	.1	51	12
Guides, Travel (Excl. Estab. or Sightseeing)	6	.0	7	2
Baggage Porters	172	.3	209	49
All Other Service Workers	65	.1	72	18
TOTAL MAINTENANCE & PRODUCTION WORKERS	25,862	47.3	28,894	5,512
Mechanics, Aircraft	574	1.0	646	108
Mechanics, Automotive	381	.7	428	79

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

STATEWIDE (CONTD.)

	Estimated 1982 Employment	Percent of Total 1982 Employment	Projected 1986 Employment	Total Job Openings 1982-1986
Diesel Mechanics (Excl. Auto & Eng. Equip.)	518	1.0	592	121
Electrical Instrument Repairers	113	.2	121	18
Electric Meter Installers & Removers	80	.1	86	11
Gas Meter Installers	13	.0	14	2
Engineering Equipment Mechanics	28	.1	32	6
Hydroelectric Machine & Powerhouse Mechs.	63	.1	68	11
Mechanics, Maintenance (Excl. Millwrights)	249	.5	270	44
Power-Transformer Repairers	156	.3	167	25
Radio Mechanics	350	.6	378	52
Treatment Plant Mechanics	89	.2	95	14
Electronic Mechanics	58	.1	63	9
Gas & Electric Appliance Repairers	85	.2	92	17
All Other Mechanics & Repairers	409	.8	454	104
Truck Drivers	419	.8	459	71
Truck Drivers, Heavy (Excl. Tractor-Trailer)	1,013	1.9	1,182	248
Truck Drivers, Light (Excl. Delivery & Route)	207	.4	243	52
Tractor-Trailer Truck Drivers	2,944	5.4	3,463	745
Baggage Handlers	100	.2	118	30
Ballast Cleaning & Tamping Machine Operators	50	.1	56	13
Bus Drivers	1,420	2.6	1,595	372
Cable Installers	290	.5	312	32
Cable Repairers	233	.4	251	31
Cable Splicers	332	.6	357	37
Carpenters (Excl. Cabinetmakers)	63	.1	69	14
Central Office Repairers	555	1.0	596	86
Cleaners, Vehicle	199	.4	232	44
Control Room Operators, Steam	80	.1	86	17
Corrosion Control Fitters	24	.1	26	5
Crane, Derrick & Hoist Operators	48	.1	52	8
Delivery & Route Workers	1,050	1.9	1,227	254
Electricians	434	.8	470	78
Auxiliary Equipment Operators	222	.4	240	47
Supervisors, Nonworking	1,704	3.1	1,876	364
Frame Wirers	224	.4	241	29
Gas Pumping Station Operators	80	.2	87	16
Ground Workers, Utilities	167	.3	180	45
Heavy Equipment Operators	234	.4	253	39
Industrial Truck Operators	122	.2	141	28
Inspectors	120	.2	129	27
Installers, Repairers &/or Section Maintainers	465	.9	500	61
Instrument Repairers	166	.3	179	28
Line Installers/Repairers	757	1.4	815	101
Machinists	362	.7	404	80
Maintenance Repairers, General Utility	768	1.4	856	159
Helpers, Trades	562	1.0	610	112
Oilers	21	.0	22	4
Painters, Automotive	9	.0	10	2
Painters, Maintenance (Excl. Production)	48	.1	52	10
Pipelayers	15	.0	16	3
Plumbers &/or Pipefitters	42	.1	46	8
Power Reactor Operators	36	.1	39	6
Station Engineers, Main Line	6	.0	6	1
Refuse Collectors	160	.3	174	25
Sewage Plant Operators	24	.1	26	3
Station Installers	503	.9	541	66
Stationary Boiler Firers	10	.0	11	2
Stationary Engineers	78	.1	84	15
Substation Operators	36	.1	39	6
Switchboard Operators, Generating Plant	16	.0	17	3
Taxi Drivers	178	.3	204	53
Trouble Locators, Test Desk	285	.5	306	37
Tire Fabricators &/or Repairers	5	.0	6	1
Trouble Shooters, Power Line	104	.2	112	17
Turbine Operators	64	.1	69	13

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

STATEWIDE (CONTD.)

	Estimated 1982 Employment	Percent of Total 1982 Employment	Projected 1986 Employment	Total Job Openings 1982-1986
Water Treatment Plant Operators	23	.0	25	4
Pump Station Operators, Waterworks	128	.2	137	20
Welders & Flamecutters	269	.5	294	56
Fuel Pump Attendants &/or Lubricators	39	.1	42	8
Tire Changers	23	.0	26	6
Surveyor Helpers	41	.1	45	8
Dispatchers, Load	15	.0	16	2
Truck Driver Helpers	444	.8	520	129
Line-Service Attendants	597	1.1	702	176
Pipeliners	6	.0	6	1
Painters, Aircraft	26	.1	30	6
Bus Drivers, School	31	.1	32	5
Ambulance Drivers &/or Attendants	189	.3	201	38
Tree Trimmers	69	.1	74	18
Motorboat Operators	18	.0	19	3
All Other Skilled Craft Workers	1,375	2.5	1,525	334
All Other Operatives & Semiskilled Workers	676	1.2	728	128
All Other Laborers & Unskilled Workers	1,673	3.1	1,881	401
TOTAL CLERICAL WORKERS	16,149	29.5	17,742	4,762
Bookkeeping &/or Billing Machine Operators	159	.3	175	46
Computer Operators	92	.2	100	18
Keypunch Operators	145	.3	158	45
Peripheral EDP Equipment Operators	95	.2	104	31
All Other Office Machine Operators	65	.1	70	23
Stenographers	135	.2	147	41
Accounting Clerks	707	1.3	789	222
Reservation Agents	140	.3	166	46
Bookkeepers, Hand	184	.3	204	57
Adjustment Clerks	182	.3	199	56
Cashiers	185	.3	204	58
Collectors	79	.1	85	18
File Clerks	145	.3	158	52
General Clerks, Office	1,921	3.5	2,113	610
Information Clerks	78	.1	92	35
Order Clerks	33	.1	36	10
Payroll &/or Timekeeping Clerks	93	.2	104	28
Personnel Clerks	54	.1	59	20
Private Branch Service Advisors	11	.0	12	3
Receptionists	53	.1	59	20
Secretaries	771	1.4	848	256
Statistical Clerks	365	.7	393	106
Switchboard Operators	332	.6	376	134
Switchboard Operators/Receptionists	74	.1	83	28
Ticket Agents	765	1.4	890	230
Traffic Clerks	90	.2	97	26
Typists	546	1.0	590	154
Clerical Supervisors, Office or Plant	598	1.1	655	131
Directory Assistance Operators	538	1.0	577	183
Telegraph Operators	45	.1	51	11
Central Office Operators	863	1.6	929	297
Station Agents	50	.1	56	13
Customer Service Representatives	1,468	2.7	1,576	424
All Other Office Clerical Workers	1,430	2.6	1,546	425
Meter Readers, Utilities	463	.8	498	66
Production Clerks &/or Coordinators	224	.4	241	41
Shipping Packers	180	.3	211	52
Shipping &/or Receiving Clerks	371	.7	408	70
Stock Clerks, Stockroom, Warehouse or Storage	538	1.0	595	119
Meter Readers, Taxi or Bus	9	.0	11	4
Dispatchers, Airplane	28	.1	32	5
Transportation Agents	230	.4	264	66
Dispatchers, Vehicle, Service or Work	593	1.1	663	140
Freight Handlers	5	.0	6	2

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

STATEWIDE (CONTD.)

	Estimated 1982 Employment	Percent of Total 1982 Employment	Projected 1986 Employment	Total Job Openings 1982-1986
Dispatchers, Police, Fire & Ambulance	8	.0	10	3
Manifest Clerks	8	.0	10	4
Rate Clerks, Freight	125	.2	144	47
Yard Clerks	36	.1	41	9
All Other Plant Clerical Workers	840	1.5	907	247
TOTAL SALES WORKERS	854	1.6	956	218
Sales Representatives, Agents &/or Associates	475	.9	516	101
Crating & Moving Estimators	77	.2	90	26
Traffic Agents	166	.3	196	53
All Other Sales Agents, Associates &/or Reps.	73	.1	86	25
Sales Clerks (Excl. Cashier)	63	.1	68	13
TOTAL ALL OCCUPATIONS	54,670	100.0	60,672	13,267

Confidential data for certain occupations, and data for occupations with employment of less than five, have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL WORKERS

All Other Engineers
  Nuclear Engineers

All Other Natural & Mathematical Scientists
  Statisticians
  Physical Scientists

All Other Professional Workers
  Home Economists

TECHNICAL WORKERS

All Other Engineering Technicians
  Sound Recording & Reproduction Technicians

All Other Technicians
  Flight Engineers

SERVICE WORKERS

All Other Service Workers
  Guides, Sightseeing or Establishment
  Railroad Police

MAINTENANCE & PRODUCTION WORKERS

All Other Mechanics & Repairers
  Body Repairers, Automotive
  Refrigeration & Air Conditioning Mechanics

MAINTENANCE & PRODUCTION WORKERS (CONTD.)

  Car Repairers
  Water Meter Installers

All Other Skilled Craft Workers
  Boilermakers
  Brakers, Train
  Conductors, Train
  Diesel Plant Operators
  Electric Track Switch Maintainers
  Firers, Locomotive
  Gas-Compressor Operators
  Hostlers
  Locomotive Engineers
  Sheet Metal Workers
  Signal Maintainers
  Tower Operators
  Yard Engineers
  Blacksmiths

All Other Operatives & Semiskilled Workers
  Craters (Excl. Carpenters)
  Locker Plant Attendants
  Chauffeurs

CLERICAL WORKERS

All Other Office Clerical Workers
  Claims Adjusters (Excl. Insurance Investigators)
  Script Clerks

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

APACHE COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	62	67	5	9	14
TOTAL PROFESSIONAL WORKERS	56	61	5	4	9
Mechanical Engineers	5	5	0	0	0
All Other Engineers	17	19	2	1	3
All Natural & Mathematical Scientists	1	1	0	0	0
Accountants & Auditors	8	9	1	1	2
Personnel & Labor Relations Specialists	6	7	1	1	2
All Other Professional Workers	19	20	1	1	2
TOTAL TECHNICAL WORKERS	65	69	4	5	9
Drafters	9	10	1	1	2
All Other Engineering Technicians	38	40	2	2	4
All Other Technicians	18	19	1	2	3
TOTAL SERVICE WORKERS	31	33	2	3	5
Janitors, Porters & Cleaners	18	20	2	3	5
Guards & Doorkeepers	4	4	0	0	0
All Other Service Workers	9	9	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	1,129	1,224	95	121	216
Mechanics, Automotive	25	27	2	2	4
Mechanics, Maintenance (Excl. Millwrights)	45	49	4	4	8
Treatment Plant Mechanics	5	5	0	0	0
Gas & Electric Appliance Repairers	9	10	1	1	2
All Other Mechanics & Repairers	16	17	1	1	2
Truck Drivers	10	11	1	1	2
Truck Drivers, Heavy (Excl. Tractor-Trailer)	17	18	1	1	2
Tractor-Trailer Truck Drivers	13	14	1	1	2
Central Office Repairers	15	16	1	1	2
Control Room Operators, Steam	20	22	2	3	5
Electricians	48	52	4	5	9
Auxiliary Equipment Operators	45	49	4	6	10
Supervisors, Nonworking	81	88	7	9	16
Heavy Equipment Operators	22	24	2	2	4
Inspectors	7	8	1	1	2
Installers, Repairers &/or Section Maintainers	40	43	3	2	5
Instrument Repairers	9	10	1	1	2
Line Installers/Repairers	50	54	4	3	7
Maintenance Repairers, General Utility	55	59	4	5	9
Helpers, Trades	96	104	8	11	19
Plumbers &/or Pipefitters	8	9	1	1	2
Sewage Plant Operators	11	12	1	1	2
Station Installers	7	8	1	0	1
Stationary Engineers	30	32	2	3	5
Welders & Flamecutters	31	34	3	4	7
All Other Skilled Craft Workers	257	281	24	38	62
All Other Operatives & Semiskilled Workers	30	31	1	1	2
All Other Laborers & Unskilled Workers	127	137	10	13	23
TOTAL CLERICAL WORKERS	306	328	22	61	83
Computer Operators	5	5	0	1	1
Keypunch Operators	5	5	0	1	1
All Other Office Machine Operators	2	2	0	0	0
Accounting Clerks	34	37	3	7	10
Cashiers	6	7	1	1	2
General Clerks, Office	39	42	3	8	11
Secretaries	24	26	2	5	7
Clerical Supervisors, Office or Plant	21	23	2	3	5
Directory Assistance Operators	14	15	1	4	5
Central Office Operators	41	44	3	11	14
Customer Service Representatives	7	9	1	2	3
All Other Office Clerical Workers	55	57	2	11	13

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

APACHE COUNTY (CONTD.)

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Stock Clerks, Stockroom, Warehouse or Storage	34	37	3	4	7
All Other Plant Clerical Workers	19	20	1	3	4
OTAL SALES WORKERS	4	4	0	0	0
All Sales Agents, Associates &/or Reps.	4	4	0	0	0
OTAL ALL OCCUPATIONS	1,653	1,786	133	203	336

onfidential data for certain occupations, and data for occupations with employment of less than five, have been dded to "All" or "All Other" categories or collapsed into major occupational classes as follows:

ROFESSIONAL WORKERS

- All Other Engineers
  - Civil Engineers
  - Electrical & Electronic Engineers

- All Other Professional Workers
  - Systems Analysts, Electronic Data Processing
  - Purchasing Agents &/or Buyers
  - Lawyers
  - Public Relations Practitioners
  - Right-of-Way Agents
  - Home Economists

TECHNICAL WORKERS

- All Other Engineering Technicians
  - Computer Programmers
  - Surveyors (Excl. Surveyor Helpers)
  - Estimators & Drafters, Utilities
  - Electrical & Electronic Technicians

- All Other Technicians
  - Science Technicians

SERVICE WORKERS

- All Other Service Workers
  - Supervisors, Nonworking
  - Baggage Porters
  - Railroad Police

MAINTENANCE & PRODUCTION WORKERS

- All Other Mechanics & Repairers
  - Diesel Mechanics (Excl. Auto & Eng. Equip.)
  - Car Repairers

- All Other Skilled Craft Workers
  - Blacksmiths
  - Boilermakers
  - Brakers, Train
  - Cable Splicers
  - Carpenters (Excl. Cabinetmakers)
  - Conductors, Train
  - Electric Track Switch Maintainers
  - Firers, Locomotive
  - Hostlers
  - Locomotive Engineers
  - Machinists
  - Sheet Metal Workers
  - Signal Maintainers
  - Yard Engineers

MAINTENANCE & PRODUCTION WORKERS (CONTD.)

- All Other Operatives & Semiskilled Workers
  - Ballast Cleaning or Tamping Machine Operators
  - Cable Installers
  - Crane, Derrick & Hoist Operators
  - Frame Wirers
  - Substation Operators
  - Tower Operators
  - Surveyor Helpers

- All Other Laborers & Unskilled Workers
  - Cleaners, Vehicle
  - Ground Workers, Utilities
  - Oilers
  - Painters, Maintenance (Excl. Production)
  - Refuse Collectors

CLERICAL WORKERS

- All Other Office Machine Operators
  - Bookkeeping &/or Billing Machine Operators
  - Peripheral EDP Equipment Operators

- All Other Office Clerical Workers
  - Stenographers
  - Adjustment Clerks
  - Collectors
  - File Clerks
  - Payroll &/or Timekeeping Clerks
  - Personnel Clerks
  - Private Branch Service Advisors
  - Receptionists
  - Statistical Clerks
  - Switchboard Operators
  - Switchboard Operators/Receptionists
  - Ticket Agents
  - Typists
  - Telegraph Operators
  - Station Agents

- All Other Plant Clerical Workers
  - Shipping &/or Receiving Clerks
  - Dispatchers
  - Freight Handlers
  - Rate Clerks, Freight
  - Yard Clerks

SALES WORKERS

- All Sales Agents, Associates &/or Reps.
  - Traffic Agents

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

COCHISE COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	111	120	9	16	25
TOTAL PROFESSIONAL WORKERS	139	149	10	11	21
Electrical & Electronic Engineers	46	50	4	3	7
All Other Engineers	13	14	1	1	2
All Natural & Mathematical Scientists	3	3	0	0	0
Purchasing Agents &/or Buyers	6	6	0	1	1
Accountants & Auditors	7	8	1	1	2
Announcers	22	24	2	2	4
All Other Professional Workers	42	44	2	3	5
TOTAL TECHNICAL WORKERS	104	111	7	9	16
Computer Programmers	9	10	1	0	1
Drafters	11	12	1	1	2
Electrical & Electronic Technicians	50	54	4	3	7
Estimators & Drafters, Utilities	6	6	0	0	0
All Other Engineering Technicians	12	13	1	1	2
All Science Technicians	2	2	0	0	0
All Medical & Dental Technicians	4	4	0	3	3
All Other Technicians	10	10	0	1	1
TOTAL SERVICE WORKERS	23	24	1	3	4
Janitors, Porters & Cleaners	12	13	1	2	3
Guards & Doorkeepers	4	4	0	0	0
Supervisors, Nonworking - Service	6	6	0	1	1
All Other Service Workers	1	1	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	743	796	53	63	116
Mechanics, Aircraft	44	47	3	3	6
Mechanics, Automotive	12	13	1	1	2
Mechanics, Maintenance (Excl. Millwrights)	22	24	2	2	4
Electronic Mechanics	19	20	1	1	2
All Other Mechanics & Repairers	27	28	1	3	4
Truck Drivers, Heavy (Excl. Tractor-Trailer)	26	28	2	2	4
Truck Drivers, Light (Excl. Delivery & Route)	6	6	0	0	0
Tractor-Trailer Truck Drivers	43	46	3	3	6
Electricians	17	18	1	2	3
Auxiliary Equipment Operators	34	37	3	5	8
Supervisors, Nonworking	37	40	3	4	7
Heavy Equipment Operators	10	11	1	1	2
Installers, Repairers &/or Section Maintainers	25	27	2	1	3
Line Installers/Repairers	74	80	6	4	10
Machinists	9	10	1	1	2
Maintenance Repairers, General Utility	20	22	2	2	4
Helpers, Trades	43	46	3	5	8
Substation Operators	19	21	2	2	4
Trouble Shooters, Power Line	11	12	1	1	2
Turbine Operators	10	11	1	1	2
Water Treatment Plant Operators	5	5	0	0	0
Welders & Flamecutters	9	10	1	1	2
Truck Driver Helpers	5	5	0	1	1
Line-Service Attendants	8	9	1	1	2
All Other Skilled Craft Workers	87	92	5	7	12
All Other Operatives & Semiskilled Workers	95	100	5	5	10
All Other Laborers & Unskilled Workers	26	28	2	4	6
TOTAL CLERICAL WORKERS	361	386	25	66	91
All Office Machine Operators	8	8	0	0	0
Accounting Clerks	14	15	1	3	4
Bookkeepers, Hand	6	6	0	1	1
Cashiers	15	16	1	3	4
File Clerks	6	6	0	2	2
General Clerks, Office	47	51	4	10	14

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

COCHISE COUNTY (CONTD.)

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Secretaries	28	30	2	6	8
Typists	24	26	2	6	8
Clerical Supervisors, Office or Plant	7	8	1	1	2
Customer Service Representatives	31	34	3	7	10
All Other Office Clerical Workers	71	75	4	15	19
Meter Readers, Utilities	20	22	2	1	3
Shipping Packers	26	28	2	3	5
Shipping &/or Receiving Clerks	6	6	0	1	1
Stock Clerks, Stockroom, Warehouse or Storage	26	28	2	3	5
Dispatchers, Vehicle, Service or Work	15	16	1	2	3
All Other Plant Clerical Workers	11	11	0	2	2
TOTAL SALES WORKERS	18	19	1	2	3
Sales Representatives, Agents &/or Associates	18	19	1	2	3
TOTAL ALL OCCUPATIONS	1,499	1,605	106	170	276

Confidential data for certain occupations, and data for occupations with employment of less than five, have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL WORKERS

- All Other Engineers
  - Civil Engineers

- All Other Professional Workers
  - Systems Analysts, Electronic Data Processing
  - Broadcast News Analysts
  - Writers &/or Editors
  - Lawyers
  - Librarians, Professional
  - Personnel & Labor Relations Specialists
  - Right-of-Way Agents
  - Travel Agents &/or Accommodations Appraisers

TECHNICAL WORKERS

- All Other Engineering Technicians
  - Surveyors (Excl. Surveyor Helpers)
  - Broadcast Technicians

- All Medical & Dental Technicians
  - Emergency Med. Techs. (Excl. Ambulance Attends.)

- All Other Technicians
  - Airplane Pilots
  - Radio Operators

MAINTENANCE & PRODUCTION WORKERS

- All Other Mechanics & Repairers
  - Diesel Mechanics (Excl. Auto & Eng. Equip.)
  - Electric Meter Installers & Removers
  - Engineering Equipment Mechanics
  - Radio Mechanics
  - Car Repairers

- All Other Skilled Craft Workers
  - Brakers
  - Cable Splicers
  - Carpenters

MAINTENANCE & PRODUCTION WORKERS (CONTD.)

  - Central Office Repairers
  - Conductors, Train
  - Firers
  - Gas Pumping Station Operators
  - Hostlers
  - Instrument Repairers
  - Locomotive Engineers
  - Sheet Metal Workers
  - Signal Maintainers
  - Station Installers
  - Trouble Locators
  - Tower Operators
  - Yard Engineers
  - Painters, Aircraft

- All Other Operatives & Semiskilled Workers
  - Truck Drivers
  - Ballast Cleaning & Tamping Machine Operators
  - Cable Installers
  - Cable Repairers
  - Delivery & Route Workers
  - Frame Wirers
  - Industrial Truck Operators
  - Inspectors
  - Surveyor Helpers

- All Other Laborers & Unskilled Workers
  - Cleaners, Vehicle
  - Ground Workers, Utilities
  - Refuse Collectors

CLERICAL WORKERS

- All Other Office Machine Operators
  - Computer Operators
  - Keypunch Operators
  - Peripheral EDP Equipment Operators

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

COCHISE COUNTY (CONTD.)

CLERICAL WORKERS (CONTD.)

- All Other Office Clerical Workers
  - Stenographers
  - Collectors
  - Order Clerks
  - Payroll &/or Timekeeping Clerks
  - Personnel Clerks
  - Receptionists
  - Statistical Clerks
  - Switchboard Operators/Receptionists
  - Ticket Agents

CLERICAL WORKERS (CONTD.)

  - Traffic Clerks
  - Directory Assistance Operators
  - Telegraph Operators
  - Central Office Operators
  - Station Agents

- All Other Plant Clerical Workers
  - Production Clerks &/or Coordinators
  - Rate Clerks, Freight
  - Yard Clerks

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

COCONINO COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	146	157	11	20	31
Managers & Officers	118	127	9	17	26
Pilots, Ship	16	17	1	1	2
All Other Managers	12	13	1	2	3
TOTAL PROFESSIONAL WORKERS	135	143	8	12	20
Electrical & Electronic Engineers	14	15	1	1	2
All Other Engineers	16	17	1	1	2
Natural & Mathematical Scientists	15	16	1	2	3
Systems Analysts, Electronic Data Processing	5	5	0	0	0
Accountants & Auditors	5	5	0	1	1
Announcers	36	39	3	3	6
Writers &/or Editors	7	8	1	1	2
Personnel & Labor Relations Specialists	6	6	0	1	1
Travel Agents &/or Accommodations Appraisers	17	18	1	2	3
All Other Professional Workers	14	14	0	0	0
TOTAL TECHNICAL WORKERS	122	131	9	28	37
Electrical & Electronic Technicians	11	12	1	1	2
Estimators & Drafters, Utilities	8	9	1	1	2
All Other Engineering Technicians	27	29	2	2	4
Airplane Pilots	25	27	2	1	3
All Medical & Dental Technicians	33	35	2	21	23
All Other Technicians	18	19	1	2	3
TOTAL SERVICE WORKERS	9	9	0	1	1
Janitors, Porters & Cleaners	6	6	0	1	1
All Other Service Workers	3	3	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	1,349	1,448	99	136	235
Mechanics, Automotive	18	19	1	1	2
Mechanics, Maintenance (Excl. Millwrights)	68	74	6	6	12
All Other Mechanics & Repairers	60	64	4	6	10
Truck Drivers	14	15	1	1	2
Truck Drivers, Heavy (Excl. Tractor-Trailer)	13	14	1	1	2
Tractor-Trailer Truck Drivers	59	63	4	4	8
Bus Drivers	106	113	7	14	21
Cable Installers	20	22	2	1	3
Cable Splicers	10	11	1	0	1
Control Room Operators, Steam	30	32	2	4	6
Corrosion Control Fitters	6	6	0	1	1
Electricians	41	44	3	4	7
Auxiliary Equipment Operators	42	45	3	6	9
Supervisors, Nonworking	93	101	8	10	18
Gas Pumping Station Operators	44	48	4	5	9
Heavy Equipment Operators	24	26	2	2	4
Inspectors	12	13	1	2	3
Instrument Repairers	23	25	2	2	4
Line Installers/Repairers	19	21	2	1	3
Machinists	23	25	2	2	4
Maintenance Repairers, General Utility	155	168	13	14	27
Helpers, Trades	22	24	2	2	4
Oilers	6	6	0	1	1
Painters, Maintenance (Excl. Production)	5	5	0	1	1
Station Installers	18	19	1	1	2
Stationary Engineers	10	11	1	1	2
Welders & Flamecutters	55	59	4	6	10
Truck Driver Helpers	20	21	1	2	3
Line-Service Attendants	17	18	1	2	3
Motorboat Operators	16	17	1	1	2
All Other Skilled Craft Workers	90	95	5	10	15
All Other Operatives & Semiskilled Workers	47	49	2	3	5
All Other Laborers & Unskilled Workers	163	175	12	19	31

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

COCONINO COUNTY (CONTD.)

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL CLERICAL WORKERS	363	387	24	66	90
All Office Machine Operators	6	6	0	1	1
Accounting Clerks	15	16	1	3	4
File Clerks	5	5	0	1	1
General Clerks, Office	63	68	5	14	19
Secretaries	20	22	2	5	7
Ticket Agents	48	51	3	6	9
Typists	8	9	1	2	3
Customer Service Representatives	35	38	3	8	11
All Other Office Clerical Workers	95	100	5	20	25
Meter Readers, Utilities	14	15	1	1	2
Stock Clerks, Stockroom, Warehouse or Storage	30	32	2	3	5
Dispatchers, Vehicle, Service or Work	8	9	1	1	2
All Other Plant Clerical Workers	16	16	0	1	1
TOTAL SALES WORKERS	18	19	1	2	3
Sales Representatives, Agents &/or Associates	18	19	1	2	3
TOTAL ALL OCCUPATIONS	2,142	2,294	152	265	417

Confidential data for certain occupations, and data for occupations with employment of less than five, have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL WORKERS

- All Other Engineers
  - Civil Engineers
  - Industrial Engineers
  - Mechanical Engineers

- All Other Professional Workers
  - Photographers
  - Purchasing Agents &/or Buyers
  - Broadcast News Analysts
  - Public Relations Practitioners
  - Reporters &/or Correspondents
  - Right-of-Way Agents
  - Home Economists

TECHNICAL WORKERS

- All Other Engineering Technicians
  - Drafters
  - Surveyors (Excl. Surveyor Helpers)
  - Broadcast Technicians
  - Computer Programmers

- All Medical & Dental Technicians
  - Emergency Med. Techs. (Excl. Ambulance Attends.)

MAINTENANCE & PRODUCTION WORKERS

- All Other Mechanics & Repairers
  - Mechanics, Aircraft
  - Diesel Mechanics (Excl. Auto & Eng. Equip.)
  - Electric Meter Installers & Removers
  - Engineering Equipment Mechanics
  - Radio Mechanics
  - Car Repairers
  - Gas & Electric Appliance Repairers

- All Other Skilled Craft workers
  - Brakers, Train
  - Carpenters (Excl. Cabinetmakers)

MAINTENANCE & PRODUCTION WORKERS (CONTD.)

  - Central Office Repairers
  - Conductors, Train
  - Firers, Locomotive
  - Gas-Compressor Operators
  - Hostlers
  - Installers, Repairers &/or Section Maintainers
  - Locomotive Engineers
  - Sheet Metal Workers
  - Signal Maintainers
  - Trouble Locators, Test Desk
  - Tower Operators
  - Yard Engineers

- All Other Operatives & Semiskilled Workers
  - Ballast Cleaning & Tamping Machine Operators
  - Cable Repairers
  - Crane, Derrick & Hoist Operators
  - Delivery & Route Workers
  - Frame Wirers
  - Pipelayers
  - Taxi Drivers
  - Water Treatment Plant Operators
  - Tire Changers
  - Surveyor Helpers

- All Other Laborers & Unskilled Workers
  - Cleaners, Vehicle
  - Ground Workers, Utilities

CLERICAL WORKERS

- All Office Machine Operators
  - Bookkeeping &/or Billing Machine Operators
  - Computer Operators

- All Other Office Clerical Workers
  - Stenographers
  - Reservation Agents
  - Bookkeepers, Hand

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

COCONINO COUNTY (CONTD.)

CLERICAL WORKERS (CONTD.)

- Adjustment Clerks
- Cashiers
- Collectors
- Payroll &/or Timekeeping Clerks
- Receptionists
- Statistical Clerks
- Switchboard Operators/Receptionists
- Traffic Clerks
- Clerical Supervisors, Office or Plant
- Directory Assistance Operators
- Telegraph Operators
- Central Office Operators
- Station Agents

All Other Plant Clerical Workers

- Production Clerks &/or Coordinators
- Shipping &/or Receiving Clerks
- Dispatchers, Airplane
- Transportation Agents
- Rate Clerks, Freight
- Yard Clerks

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

GILA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	28	30	2	4	6
TOTAL PROFESSIONAL WORKERS	11	11	0	0	0
Engineers (Incl. Sales Engineers)	3	3	0	0	0
All Other Professional Workers	8	8	0	0	0
TOTAL TECHNICAL WORKERS	8	8	0	0	0
Estimators & Drafters, Utilities	6	6	0	0	0
All Other Engineering Technicians	2	2	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	168	176	8	14	22
Hydroelectric Machine & Powerhouse Mechs.	16	17	1	1	2
All Other Mechanics & Repairers	15	15	0	0	0
Truck Drivers	9	10	1	1	2
Tractor-Trailer Truck Drivers	36	38	2	3	5
Supervisors, Nonworking	10	11	1	1	2
Line Installers/Repairers	9	10	1	1	2
Helpers, Trades	9	10	1	1	2
Trouble Shooters, Power Line	5	5	0	0	0
All Other Skilled Craft Workers	25	25	0	2	2
All Other Operatives & Semiskilled Workers	30	31	1	3	4
All Other Laborers & Unskilled Workers	4	4	0	1	1
TOTAL CLERICAL WORKERS	73	77	4	12	16
General Clerks, Office	13	14	1	3	4
Customer Service Representatives	17	18	1	4	5
All Other Office Clerical Workers	24	25	1	4	5
Meter Readers, Utilities	8	9	1	1	2
All Other Plant Clerical Workers	11	11	0	0	0
TOTAL SALES WORKERS	2	2	0	0	0
TOTAL ALL OCCUPATIONS	290	304	14	30	44

Confidential data for certain occupations, and data for occupations with employment of less than five, have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL WORKERS

- All Other Professional Workers
  - Accountants & Auditors
  - Right-of-Way Agents
  - Announcers

MAINTENANCE & PRODUCTION WORKERS

- All Other Mechanics & Repairers
  - Mechanics, Automotive
  - Diesel Mechanics (Excl. Auto & Eng. Equip.)
  - Electric Meter Installers & Removers
  - Gas Meter Installers
  - Radio Mechanics

- All Other Skilled Craft Workers
  - Brakers, Train
  - Bus Drivers
  - Cable Splicers
  - Central Office Repairers
  - Maintenance Repairers, General Utility
  - Sewage Plant Operators
  - Station Installers
  - Trouble Locators, Test Desk

MAINTENANCE & PRODUCTION WORKERS (CONTD.)

- All Other Operatives & Semiskilled Workers
  - Cable Installers
  - Cable Repairers
  - Delivery & Route Workers
  - Frame Wirers
  - Pipelayers
  - Welders & Flamecutters
  - Surveyor Helpers
  - Ambulance Drivers &/or Attendants

- All Other Laborers & Unskilled Workers
  - Ground Workers, Utilities

CLERICAL WORKERS

- All Other Office Clerical Workers
  - Bookkeeping &/or Billing Machine Operators
  - Accounting Clerks
  - Bookkeepers, Hand
  - Collectors
  - Secretaries
  - Switchboard Operators/Receptionists
  - Ticket Agents

CLERICAL WORKERS (CONTD.)

- Clerical Supervisors, Office or Plant
- Central Office Operators

All Other Plant Clerical Workers
- Production Clerks &/or Coordinators

CLERICAL WORKERS (CONTD.)

- Shipping &/or Receiving Clerks
- Stock Clerks, Stockroom, Warehouse or Storage
- Dispatchers, Vehicle, Service or Work
- Yard Clerks

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

GRAHAM AND GREENLEE COUNTIES

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	22	24	2	3	5
TOTAL PROFESSIONAL WORKERS	17	18	1	1	2
TOTAL TECHNICAL WORKERS	8	9	1	0	1
TOTAL SERVICE WORKERS	3	3	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	99	102	3	5	8
All Mechanics & Repairers	8	8	0	0	0
Maintenance Repairers, General Utility	17	18	1	2	3
All Skilled Craft Workers	45	46	1	1	2
All Operatives & Semiskilled Workers	24	25	1	2	3
All Laborers & Unskilled Workers	5	5	0	0	0
TOTAL CLERICAL WORKERS	44	45	1	8	9
All Office Machine Operators	3	3	0	0	0
Accounting Clerks	5	5	0	1	1
General Clerks, Office	9	10	1	2	3
Meter Readers, Utilities	6	6	0	0	0
All Other Office Clerical Workers	18	18	0	5	5
All Other Plant Clerical Workers	3	3	0	0	0
TOTAL SALES WORKERS	3	3	0	0	0
TOTAL ALL OCCUPATIONS	196	204	8	17	25

Confidential data for certain occupations, and data for occupations with employment of less than five, have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL WORKERS

Accountants & Auditors
Announcers
Broadcast News Analysts

MAINTENANCE & PRODUCTION WORKERS

- All Skilled Craft Workers
  - Brakers
  - Cable Splicers
  - Conductors, Train
  - Corrosion Control Fitters
  - Supervisors, Nonworking
  - Installers, Repairers &/or Section Maintainers
  - Instrument Repairers
  - Line Installers/Repairers
  - Locomotive Engineers
  - Machinists
  - Plumbers &/or Pipefitters
  - Trouble Locators

MAINTENANCE & PRODUCTION WORKERS (CONTD.)

- All Operatives & Semiskilled Workers
  - Truck Drivers
  - Truck Drivers, Heavy (Excl. Tractor-Trailer)
  - Tractor-Trailer Truck Drivers
  - Delivery & Route Workers
  - Heavy Equipment Operators
  - Welders & Flamecutters

CLERICAL WORKERS

- All Other Office Clerical Workers
  - Bookkeepers, Hand
  - Cashiers
  - Secretaries
  - Directory Assistance Operators
  - Central Office Operators
  - Customer Service Representatives

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

MARICOPA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	2,717	3,075	358	393	751
TOTAL PROFESSIONAL WORKERS	2,864	3,201	337	311	648
Chemical Engineers	7	7	0	1	1
Civil Engineers	34	38	4	5	9
Electrical & Electronic Engineers	623	667	44	37	81
Industrial Engineers	10	11	1	1	2
Mechanical Engineers	75	81	6	5	11
All Other Engineers	102	109	7	7	14
All Natural & Mathematical Scientists	25	27	2	3	5
Systems Analysts, Electronic Data Processing	100	108	8	4	12
All Teachers	12	15	3	2	5
Photographers	51	55	4	5	9
Television Camera Operators	40	43	3	3	6
Purchasing Agents &/or Buyers	40	45	5	5	10
Accountants & Auditors	186	206	20	28	48
Announcers	219	234	15	15	30
Broadcast News Analysts	69	74	5	5	10
Commercial Artists	13	14	1	2	3
Writers &/or Editors	45	48	3	8	11
Film Editors	18	19	1	3	4
Lawyers	25	27	2	3	5
Librarians, Professional	5	5	0	1	1
Personnel & Labor Relations Specialists	122	133	11	14	25
Public Relations Practitioners	6	6	0	1	1
Reporters &/or Correspondents	87	93	6	15	21
Right-of-Way Agents	29	31	2	4	6
Technical Directors	13	14	1	1	2
Travel Agents &/or Accommodations Appraisers	747	908	161	110	271
All Other Professional Workers	161	183	22	23	45
TOTAL TECHNICAL WORKERS	1,482	1,649	167	154	321
Computer Programmers	138	153	15	7	22
Drafters	130	139	9	11	20
Electrical & Electronic Technicians	226	242	16	13	29
Surveyors (Excl. Surveyor Helpers)	14	15	1	1	2
Mechanical Engineering Technicians	6	6	0	0	0
Broadcast Technicians	106	113	7	6	13
Estimators & Drafters, Utilities	118	126	8	10	18
All Other Engineering Technicians	237	253	16	24	40
Airplane Pilots	286	348	62	16	78
All Medical & Dental Technicians	78	95	17	51	68
All Other Technicians	143	159	16	15	31
TOTAL SERVICE WORKERS	723	867	144	141	285
Janitors, Porters & Cleaners	105	122	17	19	36
Guards & Doorkeepers	47	55	8	3	11
Food Service Workers (Exclude Cashiers)	29	31	2	5	7
Flight Attendants	320	389	69	95	164
Supervisors, Nonworking - Service	28	34	6	3	9
Baggage Porters	169	206	37	12	49
All Other Service Workers	25	30	5	4	9
TOTAL MAINTENANCE & PRODUCTION WORKERS	15,229	17,609	2,380	1,395	3,775
Mechanics, Aircraft	286	348	62	17	79
Mechanics, Automotive	238	277	39	20	59
Diesel Mechanics (Excl. Auto & Eng. Equip.)	363	433	70	32	102
Electrical Instrument Repairers	96	103	7	9	16
Electric Meter Installers & Removers	44	47	3	2	5
Gas Meter Installers	8	9	1	0	1
Hydroelectric Machine & Powerhouse Mechs.	8	9	1	1	2
Mechanics, Maintenance (Excl. Millwrights)	71	78	7	7	14
Power-Transformer Repairers	153	164	11	14	25

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

MARICOPA COUNTY (CONTD.)

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Radio Mechanics	201	217	16	13	29
Treatment Plant Mechanics	84	90	6	8	14
All Other Mechanics & Repairers	125	151	26	16	42
Truck Drivers	314	346	32	23	55
Truck Drivers, Heavy (Excl. Tractor-Trailer)	761	925	164	58	222
Truck Drivers, Light (Excl. Delivery & Route)	167	203	36	13	49
Tractor-Trailer Truck Drivers	2,291	2,785	494	174	668
Bus Drivers	830	1,009	179	111	290
Cable Installers	174	186	12	6	18
Cable Repairers	113	121	8	6	14
Cable Splicers	216	231	15	8	23
Carpenters (Excl. Cabinetmakers)	24	28	4	3	7
Central Office Repairers	363	388	25	30	55
Cleaners, Vehicle	153	184	31	8	39
Control Room Operators, Steam	30	32	2	4	6
Corrosion Control Fitters	5	5	0	1	1
Crane, Derrick & Hoist Operators	27	29	2	3	5
Delivery & Route Workers	790	960	170	56	226
Electricians	182	198	16	18	34
Auxiliary Equipment Operators	34	36	2	5	7
Supervisors, Nonworking	981	1,099	118	110	228
Frame Wirers	156	167	11	9	20
Ground Workers, Utilities	82	88	6	16	22
Heavy Equipment Operators	125	135	10	11	21
Industrial Truck Operators	77	93	16	6	22
Inspectors	80	86	6	12	18
Installers, Repairers &/or Section Maintainers	287	307	20	16	36
Instrument Repairers	50	54	4	5	9
Line Installers/Repairers	335	358	23	19	42
Machinists	191	219	28	20	48
Maintenance Repairers, General Utility	417	478	61	39	100
Helpers, Trades	235	260	25	27	52
Painters, Maintenance (Excl. Production)	31	33	2	4	6
Plumbers &/or Pipefitters	8	9	1	1	2
Power Reactor Operators	36	39	3	3	6
Station Installers	313	335	22	17	39
Stationary Boiler Firers	7	7	0	1	1
Stationary Engineers	24	26	2	3	5
Taxi Drivers	123	150	27	18	45
Trouble Locators, Test Desk	194	208	14	25	39
Trouble Shooters, Power Line	64	68	4	5	9
Turbine Operators	23	25	2	3	5
Water Treatment Plant Operators	9	10	1	1	2
Pump Station Operators, Waterworks	114	122	8	10	18
Welders & Flamecutters	85	96	11	10	21
Fuel Pump Attendants &/or Lubricators	18	22	4	2	6
Tire Changers	14	17	3	2	5
Surveyor Helpers	17	18	1	2	3
Dispatchers, Load	15	16	1	1	2
Truck Driver Helpers	350	426	76	41	117
Line-Service Attendants	470	572	102	55	157
All Other Skilled Craft Workers	499	586	87	55	142
All Other Operatives & Semiskilled Workers	593	649	56	67	123
All Other Laborers & Unskilled Workers	1,055	1,239	184	113	297
TOTAL CLERICAL WORKERS	11,072	12,313	1,241	2,179	3,420
Bookkeeping &/or Billing Machine Operators	84	95	11	16	27
Computer Operators	61	67	6	7	13
Keypunch Operators	110	120	10	24	34
Peripheral EDP Equipment Operators	85	93	8	20	28
All Other Office Machine Operators	58	62	4	16	20
Stenographers	69	76	7	15	22
Accounting Clerks	480	546	66	96	162

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

MARICOPA COUNTY (CONTD.)

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Reservation Agents	120	146	26	16	42
Bookkeepers, Hand	103	120	17	21	38
Adjustment Clerks	152	167	15	33	48
Cashiers	102	115	13	21	34
Collectors	46	49	3	7	10
File Clerks	84	91	7	23	30
General Clerks, Office	1,140	1,279	139	248	387
Information Clerks	67	81	14	18	32
Order Clerks	21	23	2	4	6
Payroll &/or Timekeeping Clerks	55	64	9	10	19
Personnel Clerks	45	49	4	12	16
Receptionists	34	39	5	9	14
Secretaries	522	583	61	121	182
Statistical Clerks	266	285	19	57	76
Switchboard Operators	297	338	41	81	122
Switchboard Operators/Receptionists	47	54	7	13	20
Ticket Agents	557	678	121	76	197
Traffic Clerks	55	59	4	12	16
Typists	389	420	31	100	131
Clerical Supervisors, Office or Plant	390	432	42	48	90
Directory Assistance Operators	399	427	28	107	135
Central Office Operators	422	452	30	113	143
Customer Service Representatives	1,030	1,102	72	221	293
All Other Office Clerical Workers	1,075	1,168	93	230	323
Meter Readers, Utilities	279	299	20	19	39
Production Clerks &/or Coordinators	137	147	10	15	25
Shipping Packers	131	159	28	15	43
Shipping &/or Receiving Clerks	316	348	32	28	60
Stock Clerks, Stockroom, Warehouse or Storage	316	358	42	36	78
Dispatchers, Airplane	17	21	4	1	5
Transportation Agents	164	199	35	22	57
Dispatchers, Vehicle, Service or Work	419	483	64	49	113
Rate Clerks, Freight	76	93	17	17	34
All Other Plant Clerical Workers	852	926	74	182	256
TOTAL SALES WORKERS	559	641	82	78	160
Sales Representatives, Agents &/or Associates	248	270	22	32	54
Crating & Moving Estimators	63	77	14	11	25
Traffic Agents	133	162	29	18	47
All Other Sales Agents, Associates &/or Reps.	57	69	12	10	22
Sales Clerks (Excl. Cashier)	58	63	5	7	12
TOTAL ALL OCCUPATIONS	34,646	39,355	4,709	4,651	9,360

Confidential data for certain occupations, and data for occupations with employment of less than five, have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL WORKERS

All Other Engineers
  Nuclear Engineers

All Natural & Mathematical Scientists
  Statisticians
  Physical Scientists

All Other Teachers
  Teachers, Vocational Education or Training

TECHNICAL WORKERS

All Other Engineering Technicians
  Sound Recording & Reproduction Technicians
  Video Recording Engineers

TECHNICAL WORKERS (CONTD.)

All Medical & Dental Technicians
  Emergency Med. Techs. (Excl. Ambulance Attends.)

All Other Technicians
  Flight Engineers
  Radio Operators

SERVICE WORKERS

All Other Service Workers
  Guides, Travel (Excl. Estab. or Sightseeing Guides)
  Guides, Sightseeing or Establishment
  Railroad Police

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

MARICOPA COUNTY (CONTD.)

MAINTENANCE & PRODUCTION WORKERS

- All Other Mechanics & Repairers
  - Body Repairers, Automotive
  - Engineering Equipment Mechanics
  - Refrigeration/Air Conditioning Mechanics
  - Car Repairers
  - Electronic Mechanics
  - Water Meter Installers

- All Other Skilled Craft Workers
  - Blacksmiths
  - Boilermakers
  - Brakers, Train
  - Conductors, Train
  - Electric-Track Switch Maintainers
  - Firers, Locomotive
  - Hostlers
  - Locomotive Engineers
  - Painters, Automotive
  - Sewage Plant Operators
  - Sheet Metal Workers
  - Signal Maintainers
  - Substation Operators
  - Tower Operators
  - Yard Engineers
  - Painters, Aircraft

- All Other Operatives & Semiskilled Workers
  - Ballast Cleaning or Tamping Machine Operators
  - Craters (Excl. Carpenters)

MAINTENANCE & PRODUCTION WORKERS (CONTD.)

  - Tire Fabricators &/or Repairers
  - Locker Plant Attendants
  - Chauffeurs
  - Ambulance Drivers &/or Attendants

- All Other Laborers & Unskilled Workers
  - Baggage Handlers
  - Oilers
  - Refuse Collectors
  - Tree Trimmers

CLERICAL WORKERS

- All Other Office Clerical Workers
  - Claims Adjusters (Excl. Ins. Investigators)
  - Private Branch Service Advisors
  - Telegraph Operators
  - Station Agents

- All Other Plant Clerical Workers
  - Meter Readers, Taxi or Bus
  - Freight Handlers
  - Dispatchers, Police, Fire & Ambulance
  - Manifest Clerks
  - Yard Clerks

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

MOHAVE COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	43	46	3	6	9
TOTAL PROFESSIONAL WORKERS	47	50	3	5	8
All Engineers	3	3	0	0	0
Announcers	9	10	1	1	2
All Other Professional Workers	35	37	2	4	6
TOTAL TECHNICAL WORKERS	21	23	2	2	4
Electrical & Electronic Technicians	9	10	1	1	2
All Engineering Technicians	2	2	0	0	0
All Other Technicians	10	11	1	1	2
TOTAL SERVICE WORKERS	2	2	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	321	343	22	25	47
Mechanics, Aircraft	12	13	1	1	2
All Other Mechanics & Repairers	22	24	2	1	3
Tractor-Trailer Truck Drivers	84	90	6	6	12
Supervisors, Nonworking	23	25	2	3	5
Ground Workers, Utilities	17	18	1	3	4
Instrument Repairers	5	5	0	0	0
Line Installers/Repairers	24	26	2	1	3
Maintenance Repairers, General Utility	11	12	1	1	2
Helpers, Trades	5	5	0	1	1
Water Treatment Plant Operators	7	8	1	1	2
All Other Skilled Craft Workers	55	58	3	4	7
All Other Operatives & Semiskilled Workers	36	37	1	2	3
All Other Laborers & Unskilled Workers	20	22	2	1	3
TOTAL CLERICAL WORKERS	133	140	7	22	29
Bookkeeping &/or Billing Machine Operators	5	5	0	1	1
Accounting Clerks	6	6	0	1	1
Cashiers	13	14	1	3	4
General Clerks, Office	33	36	3	7	10
Secretaries	15	16	1	3	4
All Other Office Clerical Workers	36	37	1	5	6
Meter Readers, Utilities	17	18	1	1	2
Stock Clerks, Stockroom, Warehouse or Storage	6	6	0	1	1
All Other Plant Clerical Workers	2	2	0	0	0
TOTAL SALES WORKERS	8	9	1	1	2
All Sales Agents, Associates &/or Reps.	8	9	1	1	2
TOTAL ALL OCCUPATIONS	575	613	38	61	99

Confidential data for certain occupations, and data for occupations with employment of less than five, have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL WORKERS

- All Other Professional Workers
  - Purchasing Agents &/or Buyers
  - Accountants & Auditors
  - Broadcast News Analysts
  - Writers &/or Editors
  - Travel Agents &/or Accommodations Appraisers

TECHNICAL WORKERS

- All Other Technicians
  - Airplane Pilots

MAINTENANCE & PRODUCTION WORKERS

- All Other Mechanics & Repairers
  - Diesel Mechanics (Excl. Auto & Eng. Equip.)
  - Gas Meter Installers
  - Mechanics, Maintenance (Excl. Millwrights)
  - Car Repairers
  - Gas & Electric Appliance Repairers
  - Electric Meter Installers & Removers

- All Other Skilled Craft Workers
  - Brakers, Train
  - Cable Splicers

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

MOHAVE COUNTY (CONTD.)

MAINTENANCE & PRODUCTION WORKERS (CONTD.)

- Carpenters (Excl. Cabinetmakers)
- Central Office Repairers
- Conductors, Train
- Corrosion Control Fitters
- Electricians
- Firers, Locomotive
- Installers, Repairers &/or Section Maintainers
- Locomotive Engineers
- Machinists
- Sewage Plant Operators
- Sheet Metal Workers
- Signal Maintainers
- Stationary Engineers
- Substation Operators
- Trouble Shooters, Power Line
- Yard Engineers

All Other Operatives & Semiskilled Workers
- Truck Drivers
- Truck Drivers, Light (Excl. Delivery & Route)
- Ballast Cleaning &/or Tamping Machine Operators
- Delivery & Route Workers
- Heavy Equipment Operators

MAINTENANCE & PRODUCTION WORKERS (CONTD.)

- Welders & Flamecutters
- Ambulance Drivers &/or Attendants
- Motorboat Operators

All Other Laborers & Unskilled Workers
- Refuse Collectors

CLERICAL WORKERS

All Other Office Clerical Workers
- Stenographers
- Bookkeepers, Hand
- Adjustment Clerks
- Receptionists
- Switchboard Operators
- Traffic Clerks
- Typists
- Clerical Supervisors, Office or Plant
- Telegraph Operators
- Central Office Operators
- Station Agents
- Customer Service Representatives
- Reservation Agents
- Ticket Agents

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

NAVAJO COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	101	108	7	14	21
TOTAL PROFESSIONAL WORKERS	56	60	4	4	8
Electrical & Electronic Engineers	5	5	0	0	0
All Other Engineers	16	18	2	1	3
Natural & Mathematical Scientists	2	2	0	0	0
Announcers	11	12	1	1	2
Personnel & Labor Relations Specialists	5	5	0	1	1
All Other Professional Workers	17	18	1	1	2
TOTAL TECHNICAL WORKERS	44	46	2	3	5
Drafters	5	5	0	0	0
Estimators & Drafters, Utilities	6	6	0	0	0
All Other Engineering Technicians	20	21	1	2	3
All Other Technicians	13	14	1	1	2
TOTAL SERVICE WORKERS	34	36	2	5	7
Janitors, Porters & Cleaners	28	30	2	5	7
Food Service Workers (Exclude Cashiers)	1	1	0	0	0
All Other Service Workers	5	5	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	1,116	1,186	70	122	192
Mechanics, Automotive	6	6	0	0	0
Diesel Mechanics (Excl. Auto & Eng. Equip.)	10	11	1	1	2
Mechanics, Maintenance (Excl. Millwrights)	11	12	1	1	2
All Other Mechanics & Repairers	69	72	3	9	12
Tractor-Trailer Truck Drivers	36	38	2	3	5
Auxiliary Equipment Operators	45	49	4	6	10
Supervisors, Nonworking	61	66	5	7	12
Ground Workers, Utilities	7	8	1	1	2
Installers, Repairers &/or Section Maintainers	12	13	1	1	2
Instrument Repairers	18	19	1	2	3
Line Installers/Repairers	34	37	3	2	5
Maintenance Repairers, General Utility	21	23	2	2	4
Helpers, Trades	51	55	4	6	10
Station Engineers, Main Line	6	6	0	1	1
Turbine Operators	19	21	2	3	5
Welders & Flamecutters	28	30	2	3	5
Pipeliners	6	6	0	1	1
All Other Skilled Craft Workers	383	403	20	46	66
All Other Operatives & Semiskilled Workers	117	125	8	9	17
All Other Laborers & Unskilled Workers	176	186	10	18	28
TOTAL CLERICAL WORKERS	371	399	28	73	101
All Office Machine Operators	11	11	0	2	2
Accounting Clerks	11	12	1	2	3
Cashiers	7	8	1	1	2
General Clerks, Office	63	67	4	14	18
Secretaries	14	15	1	3	4
Clerical Supervisors, Office or Plant	23	25	2	3	5
Central Office Operators	62	67	5	17	22
Customer Service Representatives	30	32	2	6	8
All Other Office Clerical Workers	84	90	6	17	23
Meter Readers, Utilities	12	13	1	1	2
Shipping &/or Receiving Clerks	7	8	1	1	2
Stock Clerks, Stockroom, Warehouse or Storage	20	22	2	2	4
All Other Plant Clerical Workers	27	29	2	4	6
TOTAL SALES WORKERS	12	13	1	1	2
All Sales Representatives, Agents &/or Associates	11	12	1	1	2
All Other Sales Workers	1	1	0	0	0
TOTAL ALL OCCUPATIONS	1,734	1,848	114	222	336

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

NAVAJO COUNTY (CONTD.)

Confidential data for certain occupations, and data for occupations with employment of less than five, have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL WORKERS

- All Other Engineers
  - Civil Engineers
  - Industrial Engineers
  - Mechanical Engineers

- All Other Professional Workers
  - Systems Analysts, Electronic Data Processing
  - Purchasing Agents &/or Buyers
  - Accountants & Auditors
  - Lawyers
  - Right-of-Way Agents

TECHNICAL WORKERS

- All Other Technicians
  - Airplane Pilots

- All Other Engineering Technicians
  - Computer Programmers
  - Electrical & Electronic Technicians
  - Surveyors (Excl. Surveyor Helpers)

SERVICE WORKERS

- All Other Service Workers
  - Baggage Porters
  - Railroad Police

MAINTENANCE & PRODUCTION WORKERS

- All Other Mechanics & Repairers
  - Mechanics, Aircraft
  - Electric Meter Installers & Removers
  - Gas Meter Installers
  - Engineering Equipment Mechanics
  - Radio Mechanics
  - Car Repairers
  - Gas & Electric Appliance Repairers

- All Other Skilled Craft Workers
  - Blacksmiths
  - Boilermakers
  - Brakers, Train
  - Cable Splicers
  - Carpenters (Excl. Cabinetmakers)
  - Central Office Repairers
  - Conductors, Train
  - Electric-Track Switch Maintainers
  - Electricians
  - Firers, Locomotive
  - Hostlers
  - Locomotive Engineers
  - Machinists
  - Plumbers &/or Pipefitters
  - Sheet Metal Workers
  - Signal Maintainers
  - Station Installers
  - Stationary Engineers
  - Substation Operators
  - Trouble Locators, Test Desk
  - Tower Operators
  - Yard Engineers

MAINTENANCE & PRODUCTION WORKERS (CONTD.)

- All Other Operatives & Semiskilled Workers
  - Truck Drivers
  - Ballast Cleaning &/or Tamping Machine Operators
  - Cable Installers
  - Cable Repairers
  - Crane, Derrick & Hoist Operators
  - Delivery & Route Workers
  - Frame Wirers
  - Heavy Equipment Operators
  - Industrial Truck Operators
  - Inspectors
  - Water Treatment Plant Operators
  - Surveyor Helpers
  - Ambulance Drivers &/or Attendants

- All Other Laborers & Unskilled Workers
  - Baggage Handlers
  - Cleaners, Vehicle
  - Oilers
  - Painters, Maintenance (Excl. Production)
  - Refuse Collectors
  - Tree Trimmers

CLERICAL WORKERS

- All Other Office Machine Operators
  - Bookkeeping &/or Billing Machine Operators
  - Computer Operators
  - Keypunch Operators
  - Peripheral EDP Equipment Operators

- All Other Office Clerical Workers
  - Stenographers
  - Bookkeepers, Hand
  - Adjustment Clerks
  - Collectors
  - File Clerks
  - Order Clerks
  - Payroll &/or Timekeeping Clerks
  - Personnel Clerks
  - Private Branch Service Advisors
  - Receptionists
  - Statistical Clerks
  - Switchboard Operators
  - Switchboard Operators-Receptionists
  - Ticket Agents
  - Typists
  - Directory Assistance Operators
  - Telegraph Operators
  - Station Agents

- All Other Plant Clerical Workers
  - Production Clerks &/or Coordinators
  - Dispatchers, Vehicle, Service or Work
  - Freight Handlers
  - Rate Clerks, Freight
  - Yard Clerks

SALES WORKERS

- All Sales Representatives, Agents &/or Associates
  - Traffic Agents

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

PIMA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	564	591	27	80	107
Managers & Officers	563	590	27	80	107
All Other Managers	1	1	0	0	0
TOTAL PROFESSIONAL WORKERS	962	1,015	59	101	160
Electrical & Electronic Engineers	175	190	15	10	25
Mechanical Engineers	21	23	2	1	3
All Other Engineers	58	63	5	5	10
Natural & Mathematical Scientists	7	7	0	1	1
Systems Analysts, Electronic Data Processing	49	53	4	2	6
All Teachers	1	1	0	0	0
Photographers	13	14	1	1	2
Television Camera Operators	29	31	2	2	4
Purchasing Agents &/or Buyers	13	14	1	2	3
Accountants & Auditors	49	52	3	7	10
Announcers	86	93	7	6	13
Broadcast News Analysts	34	37	3	2	5
Commercial Artists	9	10	1	2	3
Writers &/or Editors	39	42	3	7	10
Film Editors	11	12	1	2	3
Librarians, Professional	6	6	0	1	1
Personnel & Labor Relations Specialists	32	35	3	4	7
Reporters &/or Correspondents	28	30	2	5	7
Right-of-Way Agents	7	8	1	1	2
Technical Directors	24	26	2	1	3
Travel Agents &/or Accommodations Appraisers	242	236	0	34	34
All Other Professional Workers	29	32	3	5	8
TOTAL TECHNICAL WORKERS	258	275	18	17	35
Computer Programmers	21	23	2	1	3
Drafters	22	24	2	2	4
Electrical & Electronic Technicians	76	82	6	4	10
Broadcast Technicians	40	43	3	2	5
All Other Engineering Technicians	61	65	4	6	10
Airplane Pilots	25	24	0	1	1
All Other Technicians	13	14	1	1	2
TOTAL SERVICE WORKERS	89	95	6	13	19
Janitors, Porters & Cleaners	30	32	2	5	7
Guards & Doorkeepers	13	14	1	1	2
Food Service Workers (Exclude Cashiers)	3	3	0	0	0
All Other Service Workers	43	46	3	7	10
TOTAL MAINTENANCE & PRODUCTION WORKERS	3,963	4,116	183	392	575
Mechanics, Aircraft	96	94	0	5	5
Mechanics, Automotive	65	68	3	5	8
Diesel Mechanics (Excl. Auto & Eng. Equip.)	87	87	0	7	7
Electrical Instrument Repairers	17	18	1	2	3
Electric Meter Installers & Removers	10	11	1	1	2
Engineering Equipment Mechanics	14	15	1	1	2
Mechanics, Maintenance (Excl. Millwrights)	20	22	2	2	4
Radio Mechanics	95	103	8	6	14
Gas & Electric Appliance Repairers	50	54	4	6	10
All Other Mechanics & Repairers	122	132	10	18	28
Truck Drivers	32	33	1	2	3
Truck Drivers, Heavy (Excl. Tractor-Trailer)	135	132	0	10	10
Truck Drivers, Light (Excl. Delivery & Route)	28	27	0	2	2
Tractor-Trailer Truck Drivers	206	201	0	15	15
Bus Drivers	478	467	0	60	60
Cable Installers	42	45	3	2	5
Cable Repairers	57	62	5	3	8
Cable Splicers	54	58	4	2	6

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

PIMA COUNTY (CONTD.)

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Carpenters (Excl. Cabinetmakers)	13	15	2	2	4
Central Office Repairers	101	109	8	8	16
Cleaners, Vehicle	30	31	1	2	3
Corrosion Control Fitters	7	8	1	1	2
Crane, Derrick & Hoist Operators	13	14	1	1	2
Delivery & Route Workers	117	114	0	8	8
Electricians	73	79	6	7	13
Auxiliary Equipment Operators	7	8	1	1	2
Supervisors, Nonworking	316	337	21	35	56
Frame Wirers	50	54	4	3	7
Gas Pumping Station Operators	21	23	2	2	4
Ground Workers, Utilities	27	29	2	5	7
Heavy Equipment Operators	18	20	2	2	4
Industrial Truck Operators	16	17	1	1	2
Inspectors	9	10	1	1	2
Installers, Repairers &/or Section Maintainers	53	57	4	3	7
Instrument Repairers	32	35	3	3	6
Line Installers/Repairers	136	147	11	8	19
Maintenance Repairers, General Utility	19	20	1	2	3
Helpers, Trades	68	71	3	8	11
Oilers	7	7	0	1	1
Plumbers &/or Pipefitters	9	10	1	1	2
Station Installers	107	116	9	6	15
Substation Operators	8	9	1	1	2
Switchboard Operators, Generating Plant	11	12	1	1	2
Trouble Shooters, Power Line	13	14	1	1	2
Turbine Operators	12	13	1	2	3
Welders & Flamecutters	31	34	3	4	7
Fuel Pump Attendants &/or Lubricators	21	20	0	2	2
Tire Changers	7	7	0	1	1
Surveyor Helpers	5	5	0	1	1
Truck Driver Helpers	67	65	0	7	7
Line-Service Attendants	50	49	0	6	6
All Other Skilled Craft Workers	357	388	31	47	78
All Other Operatives & Semiskilled Workers	231	234	3	29	32
All Other Laborers & Unskilled Workers	293	306	14	30	44
TOTAL CLERICAL WORKERS	2,736	2,908	175	533	708
Bookkeeping &/or Billing Machine Operators	45	48	3	8	11
Computer Operators	18	19	1	2	3
Keypunch Operators	22	24	2	5	7
Peripheral EDP Equipment Operators	5	6	1	1	2
All Other Office Machine Operators	5	5	0	1	1
Stenographers	45	49	4	10	14
Accounting Clerks	113	120	7	22	29
Bookkeepers, Hand	37	37	0	7	7
Adjustment Clerks	23	25	2	5	7
Cashiers	25	26	1	5	6
Collectors	17	18	1	3	4
File Clerks	43	47	4	12	16
General Clerks, Office	367	388	21	79	100
Order Clerks	7	7	0	1	1
Payroll &/or Timekeeping Clerks	23	25	2	4	6
Receptionists	13	13	0	3	3
Secretaries	95	100	5	22	27
Statistical Clerks	81	88	7	18	25
Switchboard Operators	14	15	1	4	5
Switchboard Operators/Receptionists	16	17	1	4	5
Ticket Agents	126	125	0	16	16
Traffic Clerks	21	23	2	5	7
Typists	93	101	8	24	32
Clerical Supervisors, Office or Plant	121	130	9	15	24
Directory Assistance Operators	102	110	8	27	35

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

PIMA COUNTY (CONTD.)

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Central Office Operators	204	221	17	55	72
Customer Service Representatives	229	248	19	49	68
All Other Office Clerical Workers	360	387	27	75	102
Meter Readers, Utilities	70	76	6	5	11
Production Clerks &/or Coordinators	67	73	6	7	13
Shipping Packers	7	7	0	1	1
Shipping &/or Receiving Clerks	16	17	1	1	2
Stock Clerks, Stockroom, Warehouse or Storage	77	81	4	9	13
Transportation Agents	65	63	0	8	8
Dispatchers, Vehicle, Service or Work	121	123	2	14	16
Rate Clerks, Freight	18	18	0	4	4
All Other Plant Clerical Workers	25	28	3	2	5
TOTAL SALES WORKERS	154	163	9	21	30
Sales Representatives, Agents &/or Associates	106	115	9	14	23
Crating & Moving Estimators	14	14	0	2	2
Traffic Agents	16	16	0	2	2
All Other Sales Agents, Associates &/or Reps.	14	14	0	2	2
All Other Sales Workers	4	4	0	1	1
TOTAL ALL OCCUPATIONS	8,726	9,163	477	1,157	1,634

Confidential data for certain occupations, and data for occupations with employment of less than five, have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL WORKERS

- All Other Engineers
  - Chemical Engineers
  - Civil Engineers
  - Industrial Engineers

- All Other Professional Workers
  - Lawyers
  - Public Relations Practitioners

TECHNICAL WORKERS

- All Other Engineering Technicians
  - Surveyors (Excl. Surveyor Helpers)
  - Video Recording Engineers

SERVICE WORKERS

- All Other Service Workers
  - Flight Attendants
  - Supervisors, Nonworking - Service
  - Guides, Travel (Excl. Estab. or Sightseeing)
  - Baggage Porters
  - Guides, Sightseeing or Establishment
  - Railroad Police

MAINTENANCE & PRODUCTION WORKERS

- All Other Mechanics & Repairers
  - Body Repairers, Automotive
  - Hydroelectric Machine & Powerhouse Mechs.
  - Power-Transformer Repairers
  - Car Repairers
  - Electronic Mechanics
  - Water Meter Installers

MAINTENANCE & PRODUCTION WORKERS (CONTD.)

- All Other Skilled Craft Workers
  - Blacksmiths
  - Boilermakers
  - Brakers, Train
  - Conductors, Train
  - Electric-Track Switch Maintainers
  - Firers, Locomotive
  - Hostlers
  - Locomotive Engineers
  - Machinists
  - Painters, Automotive
  - Sheet Metal Workers
  - Signal Maintainers
  - Stationary Engineers
  - Trouble Locators, Test Desk
  - Tower Operators
  - Yard Engineers
  - Bus Drivers, School

- All Other Operatives & Unskilled Workers
  - Ballast Cleaning &/or Tamping Machine Operators
  - Pipelayers
  - Stationary Boiler Firers
  - Taxi Drivers
  - Tire Fabricators &/or Repairers
  - Ambulance Drivers &/or Attendants

- All Other Laborers & Unskilled Workers
  - Refuse Collectors
  - Baggage Handlers
  - Painters, Maintenance (Excl. Production Painters)

CLERICAL WORKERS

- All Other Office Clerical Workers
  - Reservation Agents
  - Claims Adjusters (Excl. Ins. Investigators)
  - Information Clerks
  - Personnel Clerks
  - Private Branch Service Advisors
  - Script Clerks
  - Telegraph Operators
  - Station Agents

CLERICAL WORKERS (CONTD.)

- All Other Plant Clerical Workers
  - Dispatchers, Airplane
  - Freight Handlers
  - Yard Clerks

SALES WORKERS

- All Other Sales Workers
  - Sales Clerks (Excl. Cashier)

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

PINAL COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	59	64	5	8	13
TOTAL PROFESSIONAL WORKERS	52	54	2	5	7
All Engineers (Incl. Sales Engineers)	10	10	0	0	0
Purchasing Agents &/or Buyers	7	7	0	1	1
Announcers	12	13	1	1	2
All Other Professional Workers	23	24	1	3	4
TOTAL TECHNICAL WORKERS	24	26	2	2	4
Electrical & Electronic Technicians	11	12	1	1	2
Estimators & Drafters, Utilities	7	8	1	1	2
All Other Engineering Technicians	3	3	0	0	0
All Other Technicians	3	3	0	0	0
TOTAL SERVICE WORKERS	25	26	1	3	4
Janitors, Porters & Cleaners	12	13	1	2	3
Guards & Doorkeepers	7	7	0	0	0
All Food Service Workers (Exclude Cashiers)	4	4	0	1	1
All Other Service Workers	2	2	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	594	634	40	50	90
Mechanics, Aircraft	95	101	6	6	12
Hydroelectric Machine & Powerhouse Mechs.	13	14	1	1	2
Radio Mechanics	16	17	1	1	2
Gas & Electric Appliance Repairers	12	13	1	1	2
All Other Mechanics & Repairers	21	22	1	2	3
Truck Drivers	5	5	0	0	0
Cleaners, Vehicle	7	7	0	0	0
Electricians	13	14	1	1	2
Supervisors, Nonworking	26	28	2	3	5
Industrial Truck Operators	17	18	1	1	2
Installers, Repairers &/or Section Maintainers	12	13	1	1	2
Instrument Repairers	7	8	1	1	2
Line Installers/Repairers	8	9	1	0	1
Machinists	10	11	1	1	2
Helpers, Trades	14	15	1	2	3
Welders & Flamecutters	13	14	1	1	2
Painters, Aircraft	10	11	1	1	2
All Other Skilled Craft Workers	101	107	6	9	15
All Other Operatives & Semiskilled Workers	116	123	7	9	16
All Other Laborers & Unskilled Workers	78	84	6	9	15
TOTAL CLERICAL WORKERS	177	189	12	31	43
All Office Machine Operators	3	3	0	0	0
General Clerks, Office	45	49	4	10	14
Secretaries	13	14	1	3	4
Customer Service Representatives	37	40	3	8	11
All Other Office Clerical Workers	40	41	1	6	7
Meter Readers, Utilities	11	12	1	1	2
Shipping &/or Receiving Clerks	12	13	1	1	2
Stock Clerks, Stockroom, Warehouse or Storage	8	9	1	1	2
All Other Plant Clerical Workers	8	8	0	1	1
TOTAL SALES WORKERS	25	27	2	3	5
All Sales Agents, Associates &/or Reps.	25	27	2	3	5
TOTAL ALL OCCUPATIONS	956	1,020	64	102	166

Confidential data for certain occupations, and data for occupations with employment of less than five, have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

PINAL COUNTY (CONTD.)

PROFESSIONAL WORKERS

- All Engineers
  - Civil Engineers
  - Electrical & Electronic Engineers
  - Mechanical Engineers

- All Other Professional Workers
  - Systems Analysts, Electronic Data Processing
  - Accountants & Auditors
  - Personnel & Labor Relations Specialists
  - Reporters &/or Correspondents
  - Right-of-Way Agents
  - Travel Agents &/or Accommodations Appraisers

TECHNICAL WORKERS

- All Other Technicians
  - Airplane Pilots

MAINTENANCE & PRODUCTION WORKERS

- All Other Mechanics & Repairers
  - Mechanics, Automotive
  - Diesel Mechanics (Excl. Auto & Eng. Equip.)
  - Mechanics, Maintenance (Excl. Millwrights)
  - Car Repairers

- All Other Skilled Craft Workers
  - Brakers, Train
  - Cable Splicers
  - Carpenters (Excl. Cabinetmakers)
  - Central Office Repairers
  - Conductors, Train
  - Corrosion Control Fitters
  - Firers, Locomotive
  - Hostlers
  - Locomotive Engineers
  - Maintenance Repairers, General Utility
  - Sheet Metal Workers
  - Signal Maintainers

MAINTENANCE & PRODUCTION WORKERS (CONTD.)

  - Stationary Engineers
  - Tower Operators
  - Yard Engineers

- All Other Operatives & Semiskilled Workers
  - Tractor-Trailer Truck Drivers
  - Ballast Cleaning &/or Tamping Machine Operators
  - Cable Installers
  - Cable Repairers
  - Crane, Derrick & Hoist Operators
  - Heavy Equipment Operators
  - Surveyor Helpers
  - Ambulance Drivers &/or Attendants

CLERICAL WORKERS

- All Other Office Clerical Workers
  - Bookkeeping &/or Billing Machine Operators
  - Keypunch Operators
  - Stenographers
  - Accounting Clerks
  - Bookkeepers, Hand
  - Cashiers
  - Collectors
  - Payroll &/or Timekeeping Clerks
  - Switchboard Operators
  - Switchboard Operators/Receptionists
  - Ticket Agents
  - Typists
  - Clerical Supervisors, Office or Plant
  - Telegraph Operators
  - Central Office Operators
  - Station Agents

- All Other Plant Clerical Workers
  - Dispatchers, Vehicle, Service or Work
  - Rate Clerks, Freight
  - Yard Clerks

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

SANTA CRUZ COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	39	42	3	6	9
TOTAL PROFESSIONAL WORKERS	29	30	1	3	4
All Engineers (Incl. Sales Engineers)	4	4	0	0	0
All Other Professional Workers	25	26	1	3	4
TOTAL TECHNICAL WORKERS	1	1	0	0	0
TOTAL SERVICE WORKERS	2	2	0	0	0
Guards & Doorkeepers	1	1	0	0	0
All Other Service Workers	1	1	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	260	277	17	23	40
Diesel Mechanics (Excl. Auto & Eng. Equip.)	15	16	1	1	2
All Other Mechanics & Repairers	5	5	0	0	0
Tractor-Trailer Truck Drivers	12	13	1	1	2
Supervisors, Nonworking	22	24	2	2	4
Line Installers/Repairers	12	13	1	1	2
Plumbers &/or Pipefitters	8	9	1	1	2
Bus Drivers, School	19	20	1	2	3
All Other Skilled Craft Workers	84	89	5	7	12
All Other Operatives & Semiskilled Workers	26	27	1	2	3
All Other Laborers & Unskilled Workers	57	61	4	6	10
TOTAL CLERICAL WORKERS	140	146	6	25	31
Bookkeeping &/or Billing Machine Operators	7	7	0	1	1
All Other Office Machine Operators	2	2	0	0	0
Accounting Clerks	7	7	0	1	1
Bookkeepers, Hand	6	6	0	1	1
General Clerks, Office	46	49	3	10	13
Secretaries	5	5	0	1	1
All Other Office Clerical Workers	31	32	1	7	8
Stock Clerks, Stockroom, Warehouse or Storage	10	11	1	1	2
Dispatchers, Vehicle, Service or Work	6	6	0	1	1
All Other Plant Clerical Workers	20	21	1	2	3
TOTAL SALES WORKERS	8	8	0	1	1
All Sales Agents, Associates &/or Reps.	8	8	0	1	1
TOTAL ALL OCCUPATIONS	479	506	27	58	85

Confidential data for certain occupations, and data for occupations with employment of less than five, have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL WORKERS

- All Engineers
  - Electrical & Electronic Engineers
- All Other Professional Workers
  - Purchasing Agents &/or Buyers
  - Accountants & Auditors
  - Announcers
  - Writers &/or Editors
  - Reporters &/or Correspondents
  - Travel Agents &/or Accommodations Appraisers

MAINTENANCE & PRODUCTION WORKERS

- All Other Skilled Craft Workers
  - Brakers, Train
  - Bus Drivers

MAINTENANCE & PRODUCTION WORKERS (CONTD.)

  - Cable Splicers
  - Conductors, Train
  - Diesel Plant Operators
  - Installers, Repairers &/or Section Maintainers
- All Other Operatives & Semiskilled Workers
  - Truck Drivers
  - Truck Drivers, Heavy (Excl. Tractor-Trailer)
  - Heavy Equipment Operators
  - Industrial Truck Operators
  - Taxi Drivers
  - Welders & Flamecutters
- All Other Laborers & Unskilled Workers
  - Helpers, Trades

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

SANTA CRUZ COUNTY (CONTD.)

CLERICAL WORKERS

- All Other Office Clerical Workers
  - Cashiers
  - Traffic Clerks
  - Typists
  - Central Office Operators
  - Customer Service Representatives

- All Other Plant Clerical Workers
  - Meter Readers, Utilities

CLERICAL WORKERS (CONTD.)

  - Shipping Packers
  - Shipping &/or Receiving Clerks

SALES WORKERS

- All Sales Agents, Associates &/or Reps.
  - Sales Representatives, Agents, &/or Associates
  - Traffic Agents

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

YAVAPAI COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	90	97	7	13	20
TOTAL PROFESSIONAL WORKERS	71	76	5	7	12
All Engineers (Incl. Sales Engineers)	6	6	0	0	0
Announcers	36	39	3	3	6
All Other Professional Workers	29	31	2	4	6
TOTAL TECHNICAL WORKERS	37	39	2	14	16
Estimators & Drafters, Utilities	8	9	1	1	2
All Other Engineering Technicians	9	9	0	0	0
All Medical & Dental Technicians	20	21	1	13	14
TOTAL SERVICE WORKERS	2	2	0	0	0
Janitors, Porters & Cleaners	2	2	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	387	409	22	28	50
Diesel Mechanics (Excl. Auto & Eng. Equip.)	7	7	0	1	1
Radio Mechanics	12	13	1	1	2
All Other Mechanics & Repairers	27	28	1	1	2
Truck Drivers	5	5	0	0	0
Tractor-Trailer Truck Drivers	106	113	7	8	15
Cable Repairers	6	6	0	0	0
Central Office Repairers	6	6	0	0	0
Supervisors, Nonworking	23	25	2	3	5
Ground Workers, Utilities	7	8	1	1	2
Installers, Repairers &/or Section Maintainers	6	6	0	0	0
Line Installers/Repairers	24	26	2	1	3
Maintenance Repairers, General Utility	19	20	1	2	3
Helpers, Trades	8	9	1	1	2
Station Installers	10	11	1	1	2
Trouble Shooters, Power Line	6	6	0	1	1
All Other Skilled Craft Workers	17	17	0	0	0
All Other Operatives & Semiskilled Workers	90	95	5	6	11
All Other Laborers & Unskilled Workers	8	8	0	1	1
TOTAL CLERICAL WORKERS	178	189	11	36	47
All Office Machine Operators	3	3	0	1	1
Accounting Clerks	6	6	0	1	1
General Clerks, Office	23	25	2	5	7
Secretaries	17	18	1	4	5
Typists	12	13	1	3	4
Clerical Supervisors, Office or Plant	8	9	1	1	2
Central Office Operators	25	27	2	7	9
Customer Service Representatives	26	28	2	6	8
All Other Office Clerical Workers	28	29	1	5	6
Meter Readers, Utilities	14	15	1	1	2
Dispatchers, Vehicle, Service or Work	6	6	0	1	1
All Other Plant Clerical Workers	10	10	0	1	1
TOTAL SALES WORKERS	20	22	2	3	5
Sales Representatives, Agents &/or Associates	20	22	2	3	5
TOTAL ALL OCCUPATIONS	785	834	49	101	150

Confidential data for certain occupations, and data for occupations with employment of less than five, have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

YAVAPAI COUNTY (CONTD.)

PROFESSIONAL WORKERS

- All Engineers
  - Electrical & Electronic Engineers

- All Other Professional Workers
  - Accountants & Auditors
  - Broadcast News Analysts
  - Reporters &/or Correspondents
  - Right-of-Way Agents
  - Travel Agents &/or Accommodations Appraisers

TECHNICAL WORKERS

- All Other Engineering Technicians
  - Electrical & Electronic Technicians
  - Surveyors (Excl. Surveyor Helpers)

- All Medical & Dental Technicians
  - Emergency Med. Techs. (Excl. Ambulance Attends.)

MAINTENANCE & PRODUCTION WORKERS

- All Other Mechanics & Repairers
  - Mechanics, Aircraft
  - Electric Meter Installers & Removers
  - Gas Meter Installers
  - Car Repairers
  - Gas & Electric Appliance Repairers

- All Other Skilled Craft Workers
  - Brakers, Train
  - Cable Splicers
  - Conductors, Train
  - Instrument Repairers
  - Plumbers &/or Pipefitters
  - Trouble Locators, Test Desk

MAINTENANCE & PRODUCTION WORKERS (CONTD.)

- All Other Operatives & Semiskilled Workers
  - Truck Drivers, Heavy (Excl. Tractor-Trailer)
  - Truck Drivers, Light (Excl. Delivery & Route)
  - Cable Installers
  - Delivery & Route Workers
  - Frame Wirers
  - Heavy Equipment Operators
  - Pipelayers
  - Tire Changers
  - Surveyor Helpers
  - Line-Service Attendants

- All Other Laborers & Unskilled Workers
  - Oilers
  - Cleaners, Vehicle
  - Tree Trimmers

CLERICAL WORKERS

- All Other Office Clerical Workers
  - Bookkeepers, Hand
  - Cashiers
  - Collectors
  - Payroll &/or Timekeeping Clerks
  - Personnel Clerks
  - Receptionists
  - Statistical Clerks
  - Traffic Clerks

- All Other Plant Clerical Workers
  - Production Clerks &/or Coordinators
  - Shipping &/or Receiving Clerks
  - Rate Clerks, Freight

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

YUMA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	95	102	7	13	20
TOTAL PROFESSIONAL WORKERS	97	103	6	9	15
Electrical & Electronic Engineers	10	11	1	1	2
All Other Engineers	5	5	0	0	0
Announcers	27	29	2	2	4
Broadcast News Analysts	6	6	0	0	0
All Other Professional Workers	49	52	3	6	9
TOTAL TECHNICAL WORKERS	62	67	5	4	9
Electrical & Electronic Technicians	13	14	1	1	2
Estimators & Drafters, Utilities	8	9	1	1	2
All Other Engineering Technicians	27	29	2	2	4
All Other Technicians	14	15	1	0	1
TOTAL SERVICE WORKERS	8	8	0	1	1
TOTAL MAINTENANCE & PRODUCTION WORKERS	492	526	34	43	77
Mechanics, Aircraft	8	9	1	0	1
Mechanics, Automotive	9	10	1	1	2
Hydroelectric Machine & Powerhouse Mechs.	12	13	1	1	2
Radio Mechanics	6	6	0	0	0
All Other Mechanics & Repairers	64	69	5	5	10
Truck Drivers	13	14	1	1	2
Tractor-Trailer Truck Drivers	30	32	2	2	4
Cable Splicers	5	5	0	0	0
Electricians	13	14	1	1	2
Auxiliary Equipment Operators	15	16	1	2	3
Supervisors, Nonworking	26	28	2	3	5
Ground Workers, Utilities	7	8	1	1	2
Installers, Repairers &/or Section Maintainers	6	6	0	0	0
Line Installers/Repairers	21	23	2	1	3
Helpers, Trades	10	11	1	1	2
Station Installers	11	12	1	1	2
Switchboard Operators, Generating Plant	5	5	0	0	0
Welders & Flamecutters	6	6	0	1	1
Line-Service Attendants	51	54	3	6	9
All Other Skilled Craft Workers	70	74	4	7	11
All Other Operatives & Semiskilled Workers	64	68	4	4	8
All Other Laborers & Unskilled Workers	40	43	3	5	8
TOTAL CLERICAL WORKERS	184	195	11	36	47
All Office Machine Operators	2	2	0	0	0
Accounting Clerks	11	12	1	2	3
Bookkeepers, Hand	9	10	1	2	3
General Clerks, Office	33	35	2	7	9
Secretaries	9	10	1	2	3
Clerical Supervisors, Office or Plant	10	11	1	1	2
Central Office Operators	18	19	1	5	6
Customer Service Representatives	20	22	2	4	6
All Other Office Clerical Workers	39	40	1	10	11
Meter Readers, Utilities	10	11	1	1	2
Production Clerks &/or Coordinators	5	5	0	1	1
Stock Clerks, Stockroom, Warehouse or Storage	6	6	0	1	1
All Other Plant Clerical Workers	12	12	0	0	0
TOTAL SALES WORKERS	22	24	2	3	5
Sales Representatives, Agents &/or Associates	22	24	2	3	5
TOTAL ALL OCCUPATIONS	960	1,025	65	109	174

Confidential data for certain occupations, and data for occupations with employment of less than five, have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

YUMA COUNTY (CONTD.)

PROFESSIONAL WORKERS

- All Other Engineers
  - Civil Engineers
  - Mechanical Engineers

- All Other Professional Workers
  - Photographers
  - Television Camera Operators
  - Purchasing Agents &/or Buyers
  - Accountants & Auditors
  - Commercial Artists
  - Writers &/or Editors
  - Librarians, Professional
  - Reporters &/or Correspondents
  - Right-of-Way Agents
  - Travel Agents &/or Accommodations Appraisers

TECHNICAL WORKERS

- All Other Engineering Technicians
  - Computer Programmers
  - Surveyors (Excl. Surveyor Helpers)
  - Broadcast Technicians

- All Other Technicians
  - Airplane Pilots
  - Radio Operators

SERVICE WORKERS

- Janitors, Porters & Cleaners
- Food Service Workers (Exclude Cashiers)
- Supervisors, Nonworking - Service

MAINTENANCE & PRODUCTION WORKERS

- All Other Mechanics & Repairers
  - Diesel Mechanics (Excl. Auto & Eng. Equip.)
  - Electric Meter Installers & Removers
  - Mechanics, Maintenance (Excl. Millwrights)
  - Car Repairers
  - Electronic Mechanics

- All Other Skilled Craft Workers
  - Brakers, Train
  - Carpenters (Excl. Cabinetmakers)
  - Central Office Repairers
  - Conductors, Train
  - Corrosion Control Fitters
  - Firers, Locomotive
  - Instrument Repairers

MAINTENANCE & PRODUCTION WORKERS (CONTD.)

  - Locomotive Engineers
  - Machinists
  - Maintenance Repairers, General Utility
  - Plumbers &/or Pipefitters
  - Signal Maintainers
  - Stationary Engineers
  - Substation Operators
  - Trouble Locators, Test Desk
  - Trouble Shooters, Power Line
  - Yard Engineers

- All Other Operatives & Semiskilled Workers
  - Truck Drivers, Heavy (Excl. Tractor-Trailer)
  - Truck Drivers, Light (Excl. Delivery & Route)
  - Ballast Cleaning &/or Tamping Machine Operators
  - Cable Installers
  - Cable Repairers
  - Crane, Derrick & Hoist Operators
  - Delivery & Route Workers
  - Frame Wirers
  - Heavy Equipment Operators
  - Pump Station Operators, Waterworks
  - Surveyor Helpers
  - Truck Driver Helpers

- All Other Laborers & Unskilled Workers
  - Painters, Maintenance
  - Refuse Collectors
  - Tree Trimmers

CLERICAL WORKERS

- All Other Office Clerical Workers
  - Stenographers
  - Collectors
  - File Clerks
  - Order Clerks
  - Switchboard Operators
  - Ticket Agents
  - Traffic Clerks
  - Typists
  - Telegraph Operators
  - Station Agents

- All Other Plant Clerical Workers
  - Shipping Packers
  - Shipping &/or Receiving Clerks
  - Dispatchers, Airplane
  - Dispatchers, Vehicle, Service or Work
  - Yard Clerks

METHODOLOGY

Sample Selection and Response Rate

Occupational estimates for the TCPU industry were developed from a survey of employers in the state. Employers who were asked to participate in the survey were selected from a master employer file of firms doing business in Arizona, using standardized sampling techniques. A sample of establishments employing 4-99 employees and all establishments having 100 or more employees were surveyed. The entire sample was composed of 726 units with a usable response rate of 90 percent. Firms responding represented 94 percent of the industry's employment.

Employment Projections

Projecting occupational employment and demand is accomplished in two basic stages. First, industry employment estimates are developed for the target years. These forecasts are computed using an econometric model driven by forecast values for variables such as national unemployment, interest rates, and industrial production. Staffing pattern ratios, as determined by the OES survey, are then applied to the industry employment projections and represents the second stage of the methodology.

Employment data represent the annual average for the specified year. "Job Opportunities" indicates the average number of job openings (based on the annual average employment) for the period between corresponding months of the specified years. The projection technique does not possess the degree of accuracy implied by small employment and demand figures.

Job Openings

"Job Opportunities" represents the sum of openings resulting from expansion and replacement during the projection period. Expansion is the numerical difference in employment for a given period. Replacement represents those job openings that transpire due to separations from the labor force, i.e., death, retirement, and pregnancy, and is based on national occupational separation rates.[1] The "Job Opportunities" column does not account for labor turnover, i.e., openings created when a worker changes jobs, leaving the job to be filled by someone else. These vacancies are generally the largest source of job openings.

Limitations of the Data

The projection methods do not account for cyclical, seasonal, and such factors as the sudden opening and closing of large establishments. Caution is advised in the use of employment forecast data for industries with limited employment - especially in the smaller counties.

Employment forecasts for the nonmetropolitan counties are based on growth rates developed for the "balance of state" (Arizona less Maricopa and Pima counties) rather than for individual counties.

---

[1] "Tomorrow's Manpower Needs," Supplement No. 4, BLS, 1974, pp. 11-16.

LABOR MARKET INFORMATION PUBLICATIONS
OCCUPATIONAL EMPLOYMENT STATISTICS
BOX 6123, SITE CODE 733A
PHOENIX, ARIZONA 85005

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
EMPLOYMENT SECURITY MAIL
LAB 441

FIRST CLASS MAIL

Reproduction of this publication for commercial use is prohibited by Section 39-121 Arizona Revised Statutes. Permission to reprint this publication, or parts of it, for nonprofit use may be granted upon written request, if credit will be given citing this publication and the Arizona Department of Economic Security.

This periodical is issued and printed by the Arizona Department of Economic Security as authorized by the Wagner-Peyser Act and is paid out of federal funds granted by the U.S. Department of Labor.

If you do NOT desire to continue receiving this publication, please check here ☐ and return this cover to address below.

If your address has changed, please indicate change and return this cover to the address below.

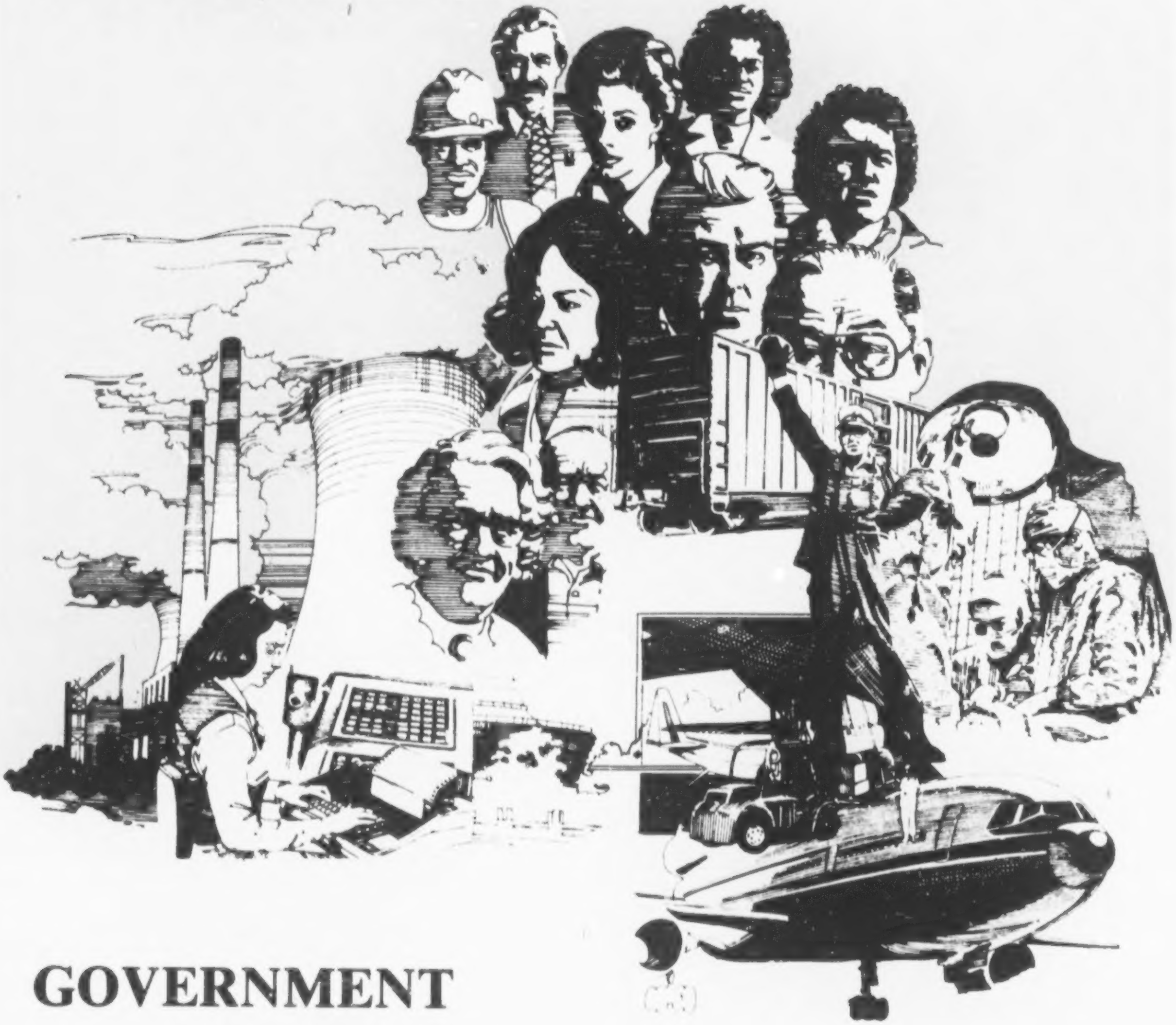
10/17/84 S0465-2.14(w) A

JULY 1984

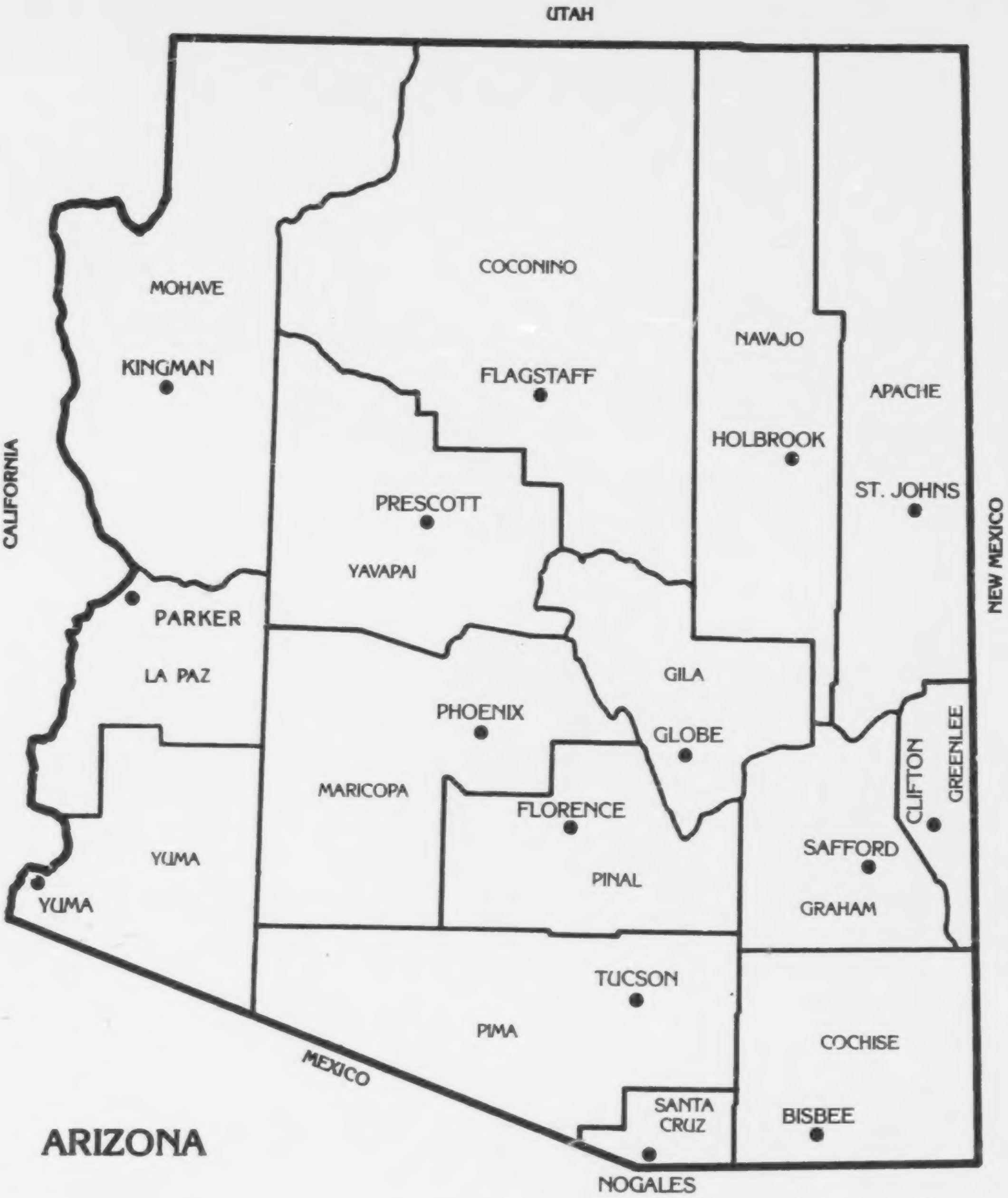
DES-5281 (7-84)

Arizona Occupational Profile

A Labor Market Information Publication of the Department of Economic Security



GOVERNMENT


UTAH
CALIFORNIA
NEW MEXICO
MEXICO
MOHAVE
KINGMAN
COCONINO
FLAGSTAFF
NAVAJO
HOLBROOK
APACHE
ST. JOHNS
PRESCOTT
YAVAPAI
PARKER
LA PAZ
GILA
GLOBE
PHOENIX
MARICOPA
FLORENCE
PINAL
GREENLEE
CLIFTON
SAFFORD
GRAHAM
YUMA
YUMA
TUCSON
PIMA
COCHISE
SANTA CRUZ
BISBEE
NOGALES

ARIZONA

OCCUPATIONAL PROFILE

The value of current and accurate occupational employment information has long been recognized by job seekers, public and private administrators, and those involved in training, recruiting, and counseling. A major source of this information in Arizona is the Occupational Employment Statistics (OES) Program - a cooperative effort between Arizona and the U. S. Bureau of Labor Statistics.

This Occupational Profile is one in a series of publications produced from information developed by the Occupational Employment Statistics survey. These publications represent one of several occupational employment information delivery systems incorporating OES survey data. The survey is used to collect employment data, by county, for over 1,000 occupations in Arizona. From these surveys, which require the cooperation of the Arizona business community, current employment in the various occupations is determined, and from this an occupational outlook is formulated. The Occupational Profiles contain the survey findings and examine, individually, the industries of Arizona.

Surveyed industries include:

- Mining
- Construction
- Manufacturing
- Transportation, Communications, and Public Utilities
- Trade
- Finance, Insurance, and Real Estate
- Services
- Government

For further information, or to comment on any aspect of this program, please write to the address on the back cover.

INDUSTRY INFORMATION

INDUSTRY DEFINITION

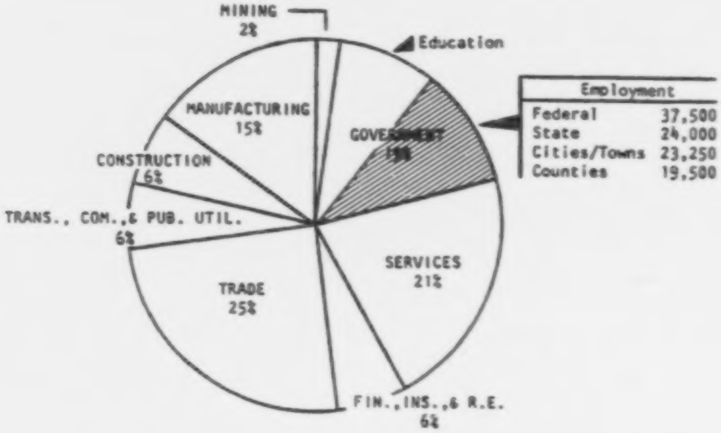
Government employees are engaged in a broad range of administrative and service delivery activities requiring a variety of occupational skills. The major functional areas of government considered in this report are: executive, legislative, judicial, public safety, transportation, finance, human resources, corrections, environment and economics. Aside from civilians working for the military, employment related to national security is not represented in this profile. Also excluded are hospital and educational facilities operated by state and local governments. Employment data for these facilities are included in separate profiles of hospitals and educational services.

A detailed description of the governmental units and activities included in this profile can be found in the Standard Industrial Classification (SIC) Manual[1] under codes 91 through 97. Various specialized functions of government are described under other SIC codes found throughout the manual.

INDUSTRY DESCRIPTION

Government workers, aside from those in the public education system, numbered approximately 104,000 in 1982, or one of every ten Arizona workers. Forty-one percent of these workers were employees of counties, cities, and towns (local governments); approximately a third were federal employees; and the remaining 23 percent were state government workers.

FIGURE 1: ARIZONA NONAGRICULTURAL EMPLOYMENT BY INDUSTRY. 1982



---

[1] Office of management and Budget, *Standard Industrial Classification Manual, 1972 Edition.*

Federal government personnel perform a variety of services, some of which have no counterpart in state or local government. The federal functions of national security (civilian military employment) and the postal service account for about half of all federal employment in Arizona.

Military employers alone - primarily the Departments of the Air Force and Army - employ one of every three federal government workers in the State.

FIGURE 2: FEDERAL EMPLOYMENT IN ARIZONA
BY SELECTED AGENCIES AND DEPARTMENTS
MAY 1982

	Arizona	Maricopa County	Pima County	Bal. of State
Military (Civil.)	11,510	2,740	1,930	6,840
Postal Service	6,900	4,470	1,280	1,150
BIA (Indian Affairs)	4,730	410	240	4,080
Veterans Admin.	3,140	1,560	1,080	500
Health, Ed. & Welfare	2,230	620	240	1,370
Forest Service	1,690	200	140	1,350
National Parks	570	10	70	490

Luke Air Force Base, west of Phoenix, and Williams Air Force Base, southeast of Phoenix, account for the majority of civilian military employees in Maricopa County. In Pima County, civilian workers at Davis Monthan Air Force Base near Tucson numbered nearly 1,400 in May 1982. Arizona's largest military installation is in Cochise County where approximately 4,000 civilians were employed at the U. S. Army's headquarters for the Army Communication Command at Fort Huachuca. In Yuma County, the Army's proving grounds employed 850 of the county's 2,400 federal workers.

State government employed more than 22,000 workers in May 1982, representing approximately 23 percent of Arizona's government workers. As one would expect, the bulk (63 percent) of state government employment is found in Maricopa County - home of the State Capital in Arizona's largest city. The relatively large number of employees in Pinal County is attributed to the state correctional facility in Florence and the center for the developmentally disabled in Coolidge.

As indicated in figure 3, the Department of Economic Security is Arizona's largest state government employer. With employment of nearly 6000, the agency is charged with fostering individual independence through training and social services, and is the agent for delivery of various transfer payments such as food stamps, unemployment insurance benefits and basic financial assistance.

FIGURE 3:
STATE GOVERNMENT EMPLOYMENT (EXC. EDUCATION) BY
COUNTY AND DEPARTMENT - MAY 1982

COUNTY	TOTAL	PUBLIC SAFETY	ECONOMIC SECURITY	TRANSPORT.	HEALTH SERVICES	OTHER
Apache	200	20	50	55		75
Cochise	255	20	105	90		35
Coconino	495	60	110	265	10	50
Gila	240	30	65	120		25
Graham/Greenlee	610	25	40	105		445
Maricopa	15,470	1,175	3,275	2,125	1,680	7,215
Mohave	255	30	70	100		50
Navajo	410	20	65	305		20
Pima	2,625	95	965	280	125	1,160
Pinal	2,710	60	905	40		1,705
Santa Cruz	110	30	20	20		40
Yavapai	575	40	65	220		250
Yuma	305	45	100	110		45
Statewide	24,260	1,650	5,835	3,845	1,815	11,120

Dominant in the "Other" category in the above table are the Departments of Administration and Corrections. Reflecting its diverse responsibilities, the Department of Administration includes the Divisions of Data Processing, Finance, Personnel, Weights and Measures, Public Buildings and the Office of Purchasing. The "Other" category also includes the Office of the Governor, the Legislature, advisory and interdepartmental committees, regulatory commissions, the Appellate and Supreme Courts and the revenue collection agencies.

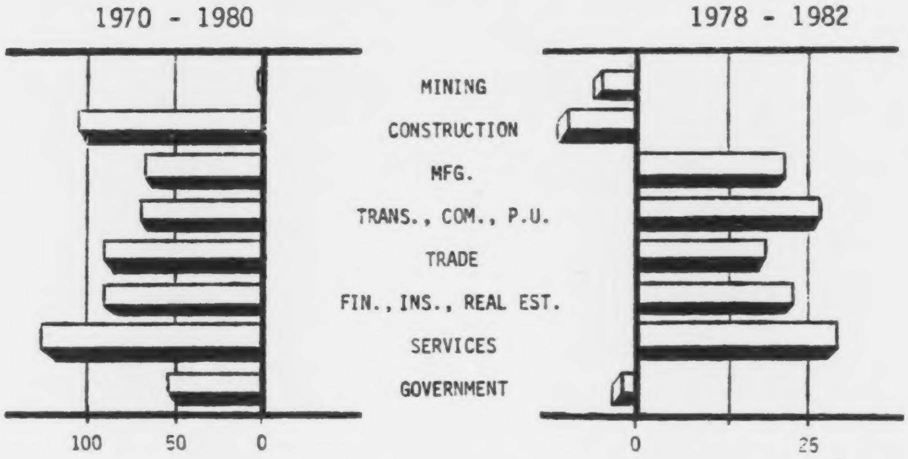
Numbering 41,000 in 1982, local government personnel accounted for more than 40 percent of all government employment in Arizona. Unlike state government employment, which is concentrated in Maricopa County, local government is distributed more proportionally as dictated by county populations.

Units of local government are defined as the political subdivisions of the state, i.e., counties, cities, towns and special districts. Multifunctional in nature, aspects of local government functions include executive, legislative, justice, public safety, transportation and general government.

INDUSTRY TRENDS

Arizona's rapidly increasing population has contributed to virtually uninterrupted growth in government employment, though increases have been significantly less than the average for all industries. Only the mining industry registered a lower growth rate during the decade of the 70s.

FIGURE 4: EMPLOYMENT CHANGE
IN ARIZONA'S INDUSTRIES (PERCENT)

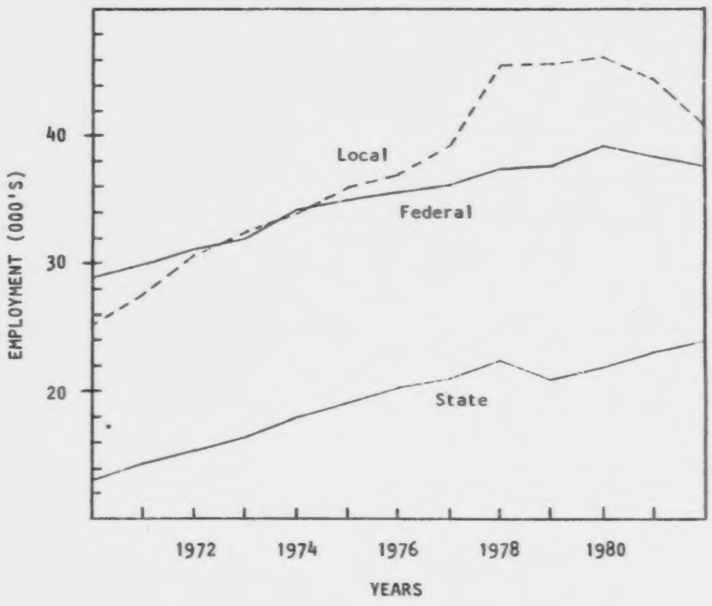


Reflecting the national trend, federal employment, in particular, has increased slowly - both over the long and short term. However, as compared to a national increase of less than 1 percent between 1970 and 1982, Arizona federal employment grew 23 percent and added nearly 9,000 employees.

Local government employment, on the other hand, has registered the greatest growth rate as it responds to the needs of a rapidly growing population and an expanding economy. Incorporation of cities and the growth and development of established municipalities have required expanded street and highway facilities, police and fire protection, and public health, sanitation and welfare services.

Along with a higher growth rate than its federal and state counterparts, local government employment is also characterized by more fluctuation as evidenced in figure 5. The most recent "hump" reflects the duration of local government efforts to combat the effects of the recession through, for example, public service employment programs.

FIGURE 5: ARIZONA'S GOVERNMENT EMPLOYMENT
1970 - 1982



Employment demand generated by a growing population's need for administrative, health, welfare, police and fire protection will continue to be suppressed by public pressure to limit budget increases. Government employment is predicted to increase 7 percent between 1982 and 1986 - the smallest increase expected in any industry. In contrast, total Arizona employment will likely expand 16 percent over the period.

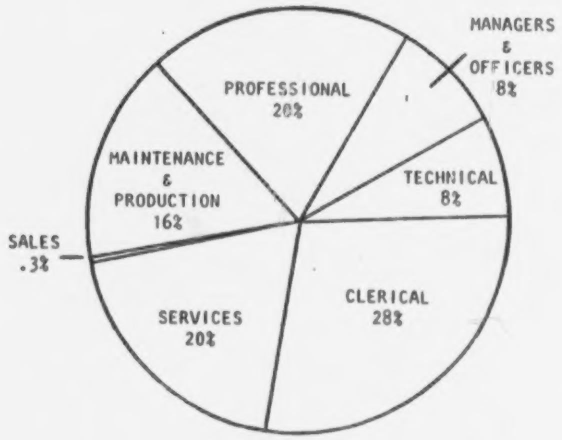
Most public employment expansion will be in state and local government which is projected to increase 9 percent for the four-year projection period. More than forcing layoffs and significantly lowering employment, pressures such as the state's constitutionally imposed spending limit will likely continue to curtail capital construction and maintenance expenses, travel and wage increases. Hiring of part-time workers in place of full time staff will further help to meet financial objectives without significantly reducing staffs.

Administration policies and public sentiment will also restrain expansion at the federal level. Bolstered, somewhat, by civilian hiring on military bases, as a result of increased defense expenditures, federal government employment is forecast to increase about 3 percent.

OCCUPATIONAL INFORMATION

As providers of a variety of services that include fire control, family counseling, road maintenance, environmental quality monitoring and swimming instruction, government employees possess a wide range of occupational skills. It is clerical workers, however, that comprise the largest occupational class - representing more than one of every four government workers. Trailing a distant second and third are maintenance and production workers and professional workers.

FIGURE 6: OCCUPATIONS IN GOVERNMENT



Comparison of the occupational distribution for the federal, state, and local government sectors reflects their functional variations. (See figure 7). In local government, for example, service workers dominate because of law enforcement and fire control responsibilities. Muncipalities employed 4,500 police officers and patrolmen/women and 2,100 firefighters in 1982. Workers maintaining Arizona's streets and highways contribute to the high percentage of maintenance and production workers at the local level.

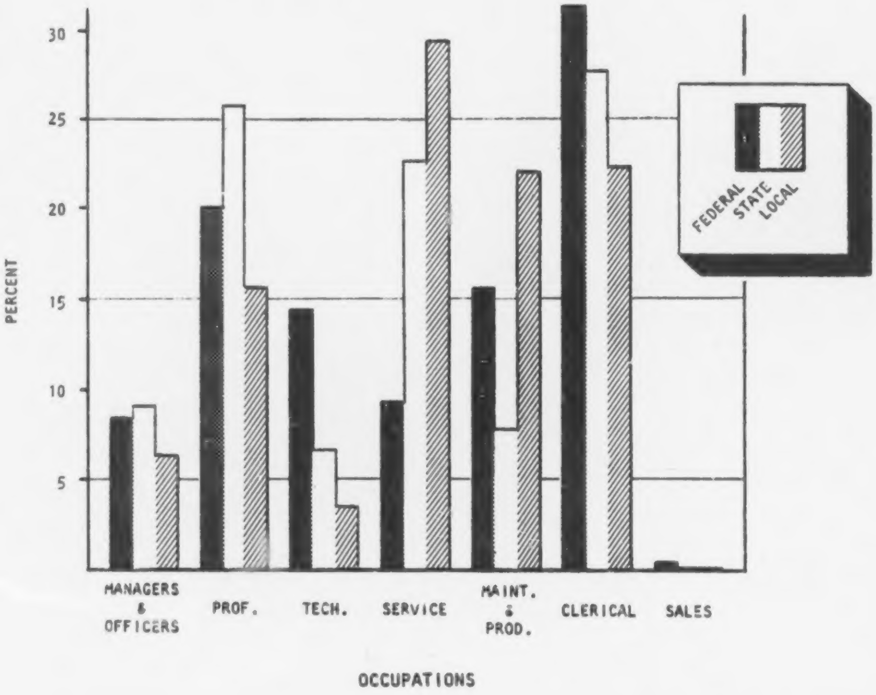
State government, on the other hand, employs a greater proportion of professional workers which includes a preponderance of caseworkers, accountants and auditors, and employment interviewers. At the federal level, postal mail carriers are most prominent and contribute to the high ranking of the clerical category. Federal government also distinguishes itself with a relatively large number of technical workers. Numbering more than 5,000, this occupational group's largest constituent, biological science technicians, comprises one-fifth of the total.

Government employment in all the major occupational categories will expand, although they will do so at varying rates. Increasing most rapidly will be the professional workers category, resulting, primarily, from expansion in health, engineering and computer occupations. Also expected to expand substantially is the services category which will be led by growth in the number of protective service workers in local governments. Most prominent in this group are police patrol officers, firefighters, and correction officers and jailors.

At the other extreme and losing the greatest share of employment is the clerical group. Automation is instrumental to the changes in this category and few occupations will experience the effects of changing technology as severely as postal service clerks. Not only will their numbers be suppressed by ever-more efficient and technical equipment, but the quantity of mail handled by the postal service will be affected by new and competing delivery systems - many of which involve the electronic transmission of information.

Also experiencing a diminishing share of government employment is the laborers category. Here, again, automation will slow employment growth in such occupations as warehouse laborers and freight and material handlers.

FIGURE 7: MAJOR OCCUPATIONAL CATEGORIES IN GOVERNMENT, 1982



Although experiencing a diminishing share of employment, clerical occupations in government will provide more than 6,000 job opportunities between 1982 and 1986 - by far the greatest number of opportunities for any occupational group. The number of openings for clerical workers created by employment growth will be matched by those resulting from workers leaving the labor force. In addition to these separations, a larger and unaccounted number of openings will result from workers changing jobs. Job turnover, as these openings are defined, are generally the greatest source of job openings, and are particularly high in clerical occupations. Typists, secretaries and general office workers head the list of occupations providing job seekers the most opportunities in the years ahead.

Outpaced by growth in other occupational groups, "managers and officers" will likely lose some of its share of employment. With more than one-fourth of the employment in the category, public administration inspectors should realize about 400 job openings over the four year period. These workers examine animals, plantlife, products and establishments for enforcement of health, safety and other regulatory laws. Typical public administration inspectors are bank examiners and customs, air pollution, food, sanitary, and housing inspectors. Demand for these workers created by expanding industry and a growing population will be constrained by limited growth in government regulatory programs and government spending.

FIGURE 8: GOVERNMENT OCCUPATIONS WITH THE GREATEST EMPLOYMENT AND JOB OPENINGS

OCCUPATIONS WITH THE GREATEST EMPLOYMENT

OCCUPATIONS	ESTIMATED 1982 EMPLOYMENT	PERCENT OF SECTOR
FEDERAL GOVERNMENT		
Postal Mail Carriers	4,600	13.0%
Managers and Officers	1,804	5.1
Typists	1,245	3.5
Biological Science Technicians	1,196	3.4
Teachers, Adult Education	1,087	3.1
General Office Clerks	1,026	2.9
Nurse's, Professional	963	2.7
Secretaries	867	2.5
Public Administration Inspectors	767	2.2
Postal Service Clerks	735	2.1
STATE AND LOCAL GOVERNMENT		
Police Patrol Officers	4,232	7.3%
Correction Officers and/or Jailors	2,837	4.9
Secretaries	2,226	3.8
Managers and Officers	2,087	3.6
Typists	2,030	3.5
Fire Fighters	1,825	3.1
General Office Clerks	1,651	2.8
Caseworkers	1,519	2.6
Heavy Equipment Operators	1,356	2.3
Highway Maintenance Workers	1,300	2.2

OCCUPATIONS WITH THE GREATEST NUMBER OF OPENINGS

OCCUPATIONS	JOB OPENINGS (Exc. Turnover) 1982-1986
FEDERAL GOVERNMENT	
Postal Mail Carriers	583
Typists	354
Managers and Officers	311
General Office Clerks	253
Secretaries	222
Nurses, Professional	215
Nurse's Aides and/or Orderlies	163
Biological Science Technicians	161
Teachers, Adult Education	145
Public Administration Inspectors	126
STATE AND LOCAL GOVERNMENT	
Correction Officers and/or Jailors	770
Secretaries	738
Typists	720
Police Patrol Officers	619
General Office Clerks	501
Managers and Offices	433
Case Workers	405
Child-Care Workers	322
Public Administration Inspectors	273
Fire Fighters	269

OCCUPATIONAL STRUCTURE

The following tables provide employment estimates and projected employment and job openings for the counties and the state. Data for federal employment in Graham and Greenlee counties have been combined due to the counties' close proximity, similar economies and size. A table for La Paz County is not included as the survey was conducted prior to this county's creation.

When using the data, please note the following:

1) The data reflect full and part-time wage and salary employment only, and do not include self-employed or unpaid family workers.

2) Total job openings represent the number of openings due to growth of the industry and separations from the labor force. They do not account for labor turnover, i.e., openings created when a worker changes jobs, leaving the job to be filled by someone else. These vacancies are often the largest source of job openings.

3) The projection technique does not possess the degree of accuracy that may be implied by small employment and demand figures.

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

STATEWIDE

	Estimated 1982 Employment	Percent of Total 1982 Employment	Projected 1986 Employment	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	2,888	8.2	2,976	511
Public Administration Inspectors	767	2.2	789	126
Construction Inspectors	130	.4	135	25
Postmasters &/or Mail Superintendents	187	.5	192	49
Managers & Officers	1,804	5.1	1,860	311
TOTAL PROFESSIONAL WORKERS	7,023	19.9	7,230	1,105
Aeronautical Engineers	8	.0	8	1
Agricultural Engineers	8	.0	8	1
Chemical Engineers	1	.0	1	0
Civil Engineers	212	.6	220	36
Electrical & Electronic Engineers	287	.8	295	24
Industrial Engineers	13	.0	13	1
Mechanical Engineers	43	.1	44	4
Mining Engineers	7	.0	7	1
Safety Engineers	8	.0	8	1
Nuclear Engineers	1	.0	1	0
All Other Engineers	96	.3	99	10
Mathematicians	26	.1	27	6
Statisticians	11	.0	11	2
All Other Mathematical Scientists	44	.1	45	11
Chemists	12	.0	12	2
Geologists & Geophysicists	157	.4	161	17
Meteorologists	19	.1	20	3
Physicists	12	.0	12	1
All Other Physical Scientists	24	.1	25	2
Agricultural Scientists	68	.2	70	12
Biological Scientists	220	.6	227	31
Foresters & Conservation Scientists	396	1.1	407	39
Economists	23	.1	24	3
Psychologists	50	.1	51	6
Sociologists	1	.0	1	0
Urban & Regional Planners	5	.0	5	0
All Other Social Scientists	132	.4	135	11
Systems Analysts, EDP	224	.6	229	15
Teachers, Nonvocational Education	1,087	3.1	1,113	145
Photographers	42	.1	43	5
Purchasing Agents &/or Buyers	233	.7	241	38
Accountants & Auditors	189	.5	195	34
Landscape Architects	14	.0	14	2
Architects	11	.0	11	2
Caseworkers	123	.3	126	25
Clergy	18	.1	18	3
Commercial Artists	32	.1	32	6
Dentists	12	.0	12	2
Dietitians &/or Nutritionists	29	.1	30	7
Writers &/or Editors	63	.2	65	13
Law Clerks	68	.2	71	10
Lawyers	100	.3	105	15
Librarians, Professional	82	.2	84	20
Curators, Museum	5	.0	5	1
Nurses, Professional	963	2.7	995	215
Occupational Therapists	7	.0	7	1
Optometrists	1	.0	1	0
Paralegal Personnel	11	.0	11	1
Personnel & Labor Relations Specialists	260	.7	269	39
Pharmacists	49	.1	50	12
Physical Therapists	14	.0	14	2
Physicians &/or Surgeons	364	1.0	375	62
Podiatrists	4	.0	4	1
Public Relations Practitioners	23	.1	24	4
Veterinarians	16	.0	16	2
Judges	21	.1	21	7

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

STATEWIDE

	Estimated 1982 Employment	Percent of Total 1982 Employment	Projected 1986 Employment	Total Job Openings 1982-1986
Tax Examiners, Collectors &/or Revenue Agents	244	.7	253	45
Appraisers, Real Estate	37	.1	39	9
Group Recreation Workers	86	.2	88	14
Manual Arts, Music &/or Recreation Therapists	8	.0	8	1
Speech Pathologists &/or Audiologists	13	.0	13	2
Corrective Therapists	3	.0	3	1
All Other Professional Workers	683	1.9	708	119
TOTAL TECHNICAL WORKERS	5,040	14.2	5,178	722
Computer Programmers	70	.2	72	5
Drafters	51	.1	53	6
Electrical & Electronic Technicians	250	.7	257	21
Surveyors	137	.4	141	13
Radiographers	2	.0	2	0
Broadcast Technicians	22	.1	23	2
All Other Engineering Technicians	401	1.1	413	55
Physical Science Technicians	113	.3	116	13
Biological Science Technicians	1,196	3.4	1,226	161
Air Traffic Controllers	301	.9	312	24
Dental Assistants	108	.3	111	32
Mathematical Technicians	29	.1	29	1
Physician's Assistants	31	.1	32	8
Museum Technicians &/or Restorers	2	.0	2	0
Airplane Pilots	59	.2	61	5
Radio Operators	13	.0	14	2
Technical Assistants, Library	31	.1	32	8
Pharmacy Helpers	36	.1	37	9
Medical Record Librarians	94	.3	97	25
Dental Hygienists	2	.0	2	0
Medical Laboratory Technologists	167	.5	172	35
Electrocardiograph Technicians	2	.0	2	0
Prosthetists/Orthotists	71	.2	73	12
Radiologic &/or Nuclear Medical Technologists	67	.2	69	13
All Other Medical & Dental Techs.	81	.2	84	50
All Other Technicians	1,704	4.8	1,746	222
TOTAL SERVICE WORKERS	3,191	9.0	3,281	527
Janitors, Porters & Cleaners	448	1.3	461	93
Guards & Doorkeepers	145	.4	149	12
Bakers, Bread &/or Pastry	3	.0	3	1
Butchers &/or Meat Cutters	70	.2	72	9
Kitchen Helpers	1	.0	1	0
Cooks, Institution or Cafeteria	268	.8	275	48
All Other Food Service Workers	347	1.0	357	72
Barbers	4	.0	4	1
Supervisors, Nonworking-Service	3	.0	3	0
Housekeepers	9	.0	9	2
Nurse's Aides &/or Orderlies	659	1.9	679	163
Forest Conservation Workers	256	.7	262	24
Fish & Game Wardens	3	.0	3	0
Guides, Sightseeing or Establishment	2	.0	2	0
Social Service Aides	24	.1	25	5
Medical Assistants	4	.0	4	1
Occupational Therapy Assistants	7	.0	7	2
Police/Detective Supervisors (Lieutenants, Sergeants, etc.)	126	.4	130	10
Detectives, Police	535	1.5	551	45
Correction Officers &/or Jailers	44	.1	45	11
U.S. Marshalls	43	.1	44	11
Fire Fighters	186	.5	191	16
All Other Service Workers	4	.0	4	1
TOTAL MAINTENANCE & PRODUCTION WORKERS	5,424	15.3	5,576	660
Mechanics, Aircraft	525	1.5	541	46
Mechanics, Automotive	162	.5	167	18

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

STATEWIDE

	Estimated 1982 Employment	Percent of Total 1982 Employment	Projected 1986 Employment	Total Job Openings 1982-1986
Body Repairers, Automotive	9	.0	9	1
Camera &/or Motion Picture Repairers	3	.0	3	0
Electric Tool Repairers	12	.0	12	1
Electrical Instrument Repairers	11	.0	11	1
Electromedical Equipment Repairers	16	.0	17	2
Engineering Equipment Mechanics	125	.4	129	14
Hydroelectric Mechanics, Powerhouse/Gas Plant	60	.2	61	7
Laundry Machine Mechanics	1	.0	1	0
Locksmiths	10	.0	10	1
Mechanics, Maintenance	225	.6	232	28
Office Machine &/or Cash Register Servicers	2	.0	2	0
Refrigeration &/or Air Conditioning Mechanics	130	.4	134	16
Treatment Plant Mechanics	4	.0	4	0
Car Repairers, Railroad	1	.0	1	0
Electronic Mechanics	245	.7	252	21
Data Processing Machine Repairers	1	.0	1	0
Gas & Electronic Appliance Repairers	3	.0	3	0
All Other Mechanics & Repairers	128	.4	132	15
Markers, Classifiers &/or Assemblers	29	.1	30	8
Washers, Machine &/or Starchers	4	.0	4	1
Dry Cleaning Machine Operators	3	.0	3	1
Pressers, Machine, Laundry	1	.0	1	0
Truck Drivers	413	1.2	424	41
Air Hammer Operators	1	.0	1	0
Blacksmiths	1	.0	1	0
Cabinetmakers	11	.0	11	1
Cable Splicers	24	.1	25	2
Carpenters	126	.4	129	19
Cement Masons	2	.0	2	0
Crane, Derrick & Hoist Operators	18	.1	19	2
Drillers, Machine	1	.0	1	5
Merchandise Displayers & Window Trimmers	3	.0	3	1
Craters	33	.1	34	0
Electricians	146	.4	150	18
Exterminators	9	.0	9	1
Supervisors, Nonworking	75	.2	77	10
Glaziers	2	.0	2	0
Heavy Equipment Operators	215	.6	220	24
Riggers	3	.0	3	0
Industrial Truck Operators	123	.3	126	12
Inspectors	39	.1	40	7
Installers, Repairers &/or Section Maintainers	10	.0	10	1
Installers, Repairers &/or Section Maintainers, Telephone	11	.0	12	1
Instrument Repairers	12	.0	13	1
Line Installers/Repairers	58	.2	60	5
Maintenance Repairers, General Utility	339	1.0	348	40
Oilers	5	.0	5	1
Painters, Maintenance	213	.6	218	31
Plasterers	2	.0	2	0
Electroplaters	1	.0	1	0
Plumbers &/or Pipefitters	103	.2	106	13
Roofers	3	.0	3	0
Rotary Drill Operators	31	.1	32	5
Dental-Laboratory Technicians	6	.0	6	1
Sandblasters &/or Shotblasters	4	.0	4	0
Sewage Plant Operators	19	.1	20	2
Sewing Machine Operators, Regular Equipment	4	.0	4	1
Sheet Metal Workers	52	.1	54	5
Stationary Boiler Firers	47	.1	48	6
Stationary Engineers	54	.2	55	8
Stone Masons	5	.0	5	1
Structural Steel Workers	1	.0	1	0
Substation Operators	6	.0	6	1
Animal Caretakers	45	.1	47	11

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

STATEWIDE

	Estimated 1982 Employment	Percent of Total 1982 Employment	Projected 1986 Employment	Total Job Openings 1982-1986
Tire Fabricators &/or Repairers	1	.0	1	0
Tool & Die Makers	3	.0	3	1
Water Treatment Plant Operators	9	.0	9	1
Pump Station Operators, Waterworks	1	.0	1	0
Track Layers	1	.0	1	0
Welders &/or Flamecutters	32	.1	33	5
Offset Lithographic Press Operators	26	.1	27	5
Strippers	19	.1	20	2
Camera Operators, Printing	2	.0	2	0
Service Station/Fuel Pump Attendants	66	.2	68	9
Stock Clerks, Sales Floor	42	.1	43	4
Highway Maintenance Workers	7	.0	7	1
Chemical Operators	2	.0	2	0
Machine Tool Operators, Combination	25	.1	26	0
Testers	40	.1	41	4
Fallers &/or Buckers	1	.0	1	0
Painters, Production	1	.0	1	6
Pulpers	1	.0	1	0
Loading Machine Operators	51	.1	52	8
Upholsterers	1	.0	1	0
Gardeners & Groundskeepers	27	.1	28	6
All Other Bindery Workers	4	.0	4	0
All Other Skilled Craft Workers	16	.1	17	2
All Other Operatives & Semiskilled Workers	187	.5	192	26
All Other Laborers & Unskilled Workers	873	2.5	898	122
TOTAL CLERICAL WORKERS	11,643	32.9	12,045	2,266
Computer Operators	60	.2	61	8
Keypunch Operators	93	.3	96	23
Tabulating Machine Operators	4	.0	4	1
All Other Office Machine Operators	13	.0	13	4
Stenographers	203	.6	210	50
Accounting Clerks	358	1.0	369	81
Bookkeepers, Hand	65	.2	67	14
Cashiers	36	.1	37	8
Claims Adjusters	47	.1	49	7
Claims Clerks	140	.4	145	35
Correspondence Clerks	2	.0	2	0
General Office Clerks	1,028	2.9	1,062	253
Mail Clerks	134	.4	138	27
Payroll &/or Timekeeping Clerks	103	.3	106	21
Personnel Clerks	216	.6	223	66
Procurement Clerks	78	.2	80	12
Real Estate Clerks	66	.2	68	16
Receptionists	19	.1	20	6
Secretaries	867	2.5	893	222
Statistical Clerks	17	.0	18	4
Switchboard Operators	105	.3	109	32
Messengers	4	.0	4	1
Travel Clerks	19	.1	20	5
Typists	1,245	3.5	1,282	354
Clerical Supervisors, Office or Plant	39	.1	40	6
Postal Service Clerks	735	2.1	760	115
All Other Office Clerical Workers	832	2.4	859	204
Production Clerks &/or Coordinators	53	.1	55	7
Shipping Packers	11	.0	11	1
Shipping &/or Receiving Clerks	22	.1	23	3
Weighers, Recordkeeping	3	.0	3	0
Stock Clerks, Stockroom, Warehouse or Storage	38	.1	39	5
Dispatchers, Vehicle, Service or Work	20	.1	21	3
Postal Mail Carriers	4,600	13.0	4,779	583
All Other Plant Clerical Workers	368	1.0	379	89
TOTAL SALES WORKERS	157	.5	163	25
Sales Clerks	157	.5	163	25
TOTAL ALL OCCUPATIONS	35,366	100.0	36,449	5,816

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

APACHE COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	99	103	4	16	20
Public Administration Inspectors	1	1	0	0	0
Construction Inspectors	16	17	1	3	4
Postmasters &/or Mail Superintendents	17	18	1	4	5
Managers & Officers	65	67	2	9	11
TOTAL PROFESSIONAL WORKERS	564	576	12	67	79
Civil Engineers	19	20	1	2	3
Electrical & Electronic Engineers	1	1	0	0	0
Mining Engineers	1	1	0	0	0
Statisticians	1	1	0	0	0
Geologists & Geophysicists	3	3	0	0	0
Agricultural Scientists	7	7	0	1	1
Biological Scientists	5	5	0	1	1
Foresters & Conservation Scientists	44	45	1	3	4
Economists	1	1	0	0	0
Psychologists	2	2	0	0	0
All Other Social Scientists	3	3	0	0	0
Teachers, Nonvocational Education	281	287	6	31	37
Accountants & Auditors	6	6	0	1	1
Landscape Architects	1	1	0	0	0
Architects	1	1	0	0	0
Caseworkers	25	25	0	4	4
Commercial Artists	1	1	0	0	0
Dietitians &/or Nutritionists	2	2	0	0	0
Lawyers	2	2	0	0	0
Librarians, Professional	2	2	0	0	0
Curators, Museum	2	2	0	0	0
Nurses, Professional	57	59	2	11	13
Paralegal Personnel	3	3	0	0	0
Personnel & Labor Relations Specialists	16	17	1	2	3
Physical Therapists	1	1	0	0	0
Physicians &/or Surgeons	7	7	0	1	1
Public Relations Practitioners	1	1	0	0	0
Group Recreation Workers	27	27	0	4	4
All Other Professional Workers	42	43	1	6	7
TOTAL TECHNICAL WORKERS	703	721	18	83	101
Drafters	3	3	0	0	0
Electrical & Electronic Technicians	2	2	0	0	0
Surveyors	20	21	1	1	2
All Other Engineering Technicians	51	52	1	5	6
Physical Science Technicians	6	6	0	0	0
Biological Science Technicians	112	115	3	12	15
Dental Assistants	17	18	1	5	6
Physician's Assistants	4	4	0	1	1
Technical Assistants, Library	1	1	0	0	0
Pharmacy Helpers	1	1	0	0	0
Medical Record Librarians	18	19	1	4	5
Medical Laboratory Technologists	15	16	1	3	4
Radiologic &/or Nuclear Medical Technologists	5	5	0	1	1
All Other Medical & Dental Techs.	9	9	0	5	5
All Other Technicians	439	449	10	46	56
TOTAL SERVICE WORKERS	232	237	5	38	43
Janitors, Porters & Cleaners	57	59	2	10	12
Guards & Doorkeepers	4	4	0	0	0
Cooks, Institution or Cafeteria	56	57	1	8	9
All Other Food Service Workers	45	46	1	8	9
Nurse's Aides &/or Orderlies	53	54	1	11	12
Social Service Aides	7	7	0	1	1
Occupational Therapy Assistants	1	1	0	0	0
Police/Detective Supervisors (Lieutenants, Sergeants, etc.)	3	3	0	0	0
Detectives, Police	6	6	0	0	0

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

APACHE COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MAINTENANCE & PRODUCTION WORKERS	285	291	6	25	31
Mechanics, Automotive	2	2	0	0	0
Electric Tool Repairers	2	2	0	0	0
Electromedical Equipment Repairers	2	2	0	0	0
Engineering Equipment Mechanics	6	6	0	0	0
Locksmiths	1	1	0	0	0
Mechanics, Maintenance	11	11	0	1	1
Refrigeration &/or Air Conditioning Mechanics	3	3	0	0	0
Truck Drivers	57	59	2	4	6
Carpenters	9	9	0	1	1
Electricians	9	9	0	1	1
Supervisors, Nonworking	12	13	1	1	2
Heavy Equipment Operators	24	25	1	2	3
Industrial Truck Operators	1	1	0	0	0
Maintenance Repairers, General Utility	48	49	1	4	5
Painters, Maintenance	9	9	0	1	1
Plumbers &/or Pipefitters	16	17	1	2	3
Rotary Drill Operators	1	1	0	0	0
Stationary Boiler Firers	8	8	0	1	1
Stationary Engineers	4	4	0	0	0
Welders & Flamecutters	1	1	0	0	0
All Other Operatives & Semiskilled Workers	26	26	0	3	3
All Other Laborers & Unskilled Workers	33	33	0	4	4
TOTAL CLERICAL WORKERS	318	325	7	69	76
Computer Operators	2	2	0	0	0
Stenographers	6	6	0	1	1
Accounting Clerks	14	15	1	3	4
Bookkeepers, Hand	9	9	0	2	2
Cashiers	1	1	0	0	0
General Office Clerks	32	32	0	7	7
Mail Clerks	1	1	0	0	0
Payroll &/or Timekeeping Clerks	4	4	0	1	1
Personnel Clerks	14	15	1	4	5
Procurement Clerks	4	4	0	0	0
Real Estate Clerks	8	8	0	2	2
Secretaries	76	77	1	17	18
Statistical Clerks	3	3	0	1	1
Switchboard Operators	5	5	0	1	1
Typists	82	84	2	21	23
Clerical Supervisors, Office or Plant	2	2	0	0	0
Postal Service Clerks	21	22	1	3	4
All Other Office Clerical Workers	20	21	1	4	5
Stock Clerks, Stockroom, Warehouse or Storage	1	1	0	0	0
Postal Mail Carriers	4	4	0	0	0
All Other Plant Clerical Workers	9	9	0	2	2
TOTAL ALL OCCUPATIONS	2,201	2,253	52	298	350

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

COCHISE COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	603	618	15	86	101
Public Administration Inspectors	112	115	3	15	18
Construction Inspectors	4	4	0	1	1
Postmasters &/or Mail Superintendents	17	18	1	4	5
Managers & Officers	470	481	11	66	77
TOTAL PROFESSIONAL WORKERS	1,031	1,054	23	101	124
Civil Engineers	3	3	0	0	0
Electrical & Electronic Engineers	230	235	5	13	18
Industrial Engineers	4	4	0	0	0
Mechanical Engineers	7	7	0	0	0
Safety Engineers	5	5	0	0	0
All Other Engineers	19	20	1	1	2
Mathematicians	4	4	0	1	1
Statisticians	1	1	0	0	0
All Other Mathematical Scientists	38	39	1	8	9
Meteorologists	1	1	0	0	0
Physicists	7	7	0	0	0
Agricultural Scientists	3	3	0	0	0
Biological Scientists	5	5	0	1	1
Foresters & Conservation Scientists	15	16	1	1	2
Psychologists	1	1	0	0	0
All Other Social Scientists	72	74	2	4	6
Systems Analysts, EDP	171	174	3	7	10
Teachers, Nonvocational Education	51	52	1	6	7
Photographers	13	14	1	1	2
Purchasing Agents &/or Buyers	34	34	0	4	4
Accountants & Auditors	53	54	1	8	9
Architects	1	1	0	0	0
Caseworkers	1	1	0	0	0
Commercial Artists	21	22	1	4	5
Dentists	1	1	0	0	0
Writers &/or Editors	48	49	1	8	9
Law Clerks	2	2	0	0	0
Lawyers	5	5	0	1	1
Librarians, Professional	67	69	2	15	17
Curators, Museum	1	1	0	0	0
Nurses, Professional	22	23	1	4	5
Paralegal Personnel	1	1	0	0	0
Personnel & Labor Relations Specialists	64	66	2	7	9
Pharmacists	2	2	0	0	0
Physicians &/or Surgeons	7	7	0	1	1
Public Relations Practitioners	9	9	0	1	1
Veterinarians	2	2	0	0	0
Group Recreation Workers	8	8	0	1	1
All Other Professional Workers	32	32	0	4	4
TOTAL TECHNICAL WORKERS	378	388	10	40	50
Computer Programmers	29	29	0	1	1
Drafters	8	8	0	1	1
Electrical & Electronic Technicians	64	66	2	4	6
Broadcast Technicians	3	3	0	0	0
All Other Engineering Technicians	23	24	1	2	3
Biological Science Technicians	39	40	1	4	5
Air Traffic Controllers	17	18	1	1	2
Dental Assistants	24	25	1	6	7
Mathematical Technicians	1	1	0	0	0
Physician's Assistants	3	3	0	1	1
Museum Technicians &/or Restorers	2	2	0	0	0
Airplane Pilots	1	1	0	0	0
Technical Assistants, Library	12	13	1	3	4
Pharmacy Helpers	1	1	0	0	0
Medical Record Librarians	3	3	0	1	1

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

COCHISE COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Medical Laboratory Technologists	6	6	0	1	1
Electrocardiograph Technicians	1	1	0	0	0
Radiologic &/or Nuclear Medical Technologists	3	3	0	0	0
All Other Medical & Dental Techs.	1	1	0	1	1
All Other Technicians	137	140	3	14	17
TOTAL SERVICE WORKERS	164	169	5	18	23
Janitors, Porters & Cleaners	18	19	1	3	4
Guards & Doorkeepers	42	43	1	2	3
Bakers, Bread &/or Pastry	1	1	0	0	0
Butchers &/or Meat Cutters	11	12	1	1	2
Cooks, Institution or Cafeteria	4	4	0	1	1
All Other Food Service Workers	10	10	0	2	2
Housekeepers	1	1	0	0	0
Nurse's Aides &/or Orderlies	24	25	1	5	6
Social Service Aides	6	6	0	1	1
Detectives, Police	10	10	0	1	1
Fire Fighters	37	38	1	2	3
TOTAL MAINTENANCE & PRODUCTION WORKERS	697	712	15	64	79
Mechanics, Aircraft	3	3	0	0	0
Mechanics, Automotive	32	32	0	3	3
Body Repairers, Automotive	2	2	0	0	0
Camera &/or Motion Picture Repairers	2	2	0	0	0
Electromedical Equipment Repairers	3	3	0	0	0
Engineering Equipment Mechanics	25	25	0	2	2
Locksmiths	2	2	0	0	0
Mechanics, Maintenance	15	16	1	1	2
Office Machine &/or Cash Register Servicers	2	2	0	0	0
Refrigeration &/or Air Conditioning Mechanics	20	21	1	2	3
Electronic Mechanics	57	58	1	3	4
Gas & Electronic Appliance Repairers	1	1	0	0	0
All Other Mechanics & Repairers	11	11	0	1	1
Markers, Classifiers &/or Assemblers	11	11	0	3	3
Washers, Machine &/or Starchers	2	2	0	0	0
Dry Cleaning Machine Operators	1	1	0	0	0
Pressers, Machine, Laundry	1	1	0	0	0
Truck Drivers	35	36	1	3	4
Cabinetmakers	2	2	0	0	0
Cable Splicers	9	9	0	0	0
Carpenters	14	15	1	2	3
Crane, Derrick & Hoist Operators	1	1	0	0	0
Merchandise Displayers & Window Trimmers	3	3	0	1	1
Electricians	21	22	1	2	3
Exterminators	4	4	0	0	0
Supervisors, Nonworking	6	6	0	1	1
Glaziers	2	2	0	0	0
Heavy Equipment Operators	9	9	0	1	1
Riggers	1	1	0	0	0
Industrial Truck Operators	25	25	0	2	2
Inspectors	7	7	0	1	1
Installers, Repairers &/or Section Maintainers	11	12	1	1	2
Maintenance Repairers, General Utility	33	33	0	3	3
Painters, Maintenance	10	10	0	1	1
Plumbers &/or Pipefitters	26	26	0	3	3
Roofers	2	2	0	0	0
Dental-Laboratory Technicians	1	1	0	0	0
Sewage Plant Operators	7	7	0	0	0
Sewing Machine Operators, Regular Equipment	1	1	0	0	0
Sheet Metal Workers	10	10	0	1	1
Stationary Boiler Firers	13	14	1	2	3
Stationary Engineers	3	3	0	0	0

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

COCHISE COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Stone Masons	2	2	0	0	0
Animal Caretakers	2	2	0	0	0
Welders &/or Flamecutters	3	3	0	0	0
Offset Lithographic Press Operators	16	17	1	3	4
Strippers	19	20	1	1	2
Camera Operators, Printing	1	1	0	0	0
Service Station/Fuel Pump Attendants	57	59	2	6	8
Stock Clerks, Sales Floor	28	28	0	2	2
Machine Tool Operators, Combination	3	3	0	0	0
Pulpers	1	1	0	0	0
Loading Machine Operators	1	1	0	0	0
Gardeners & Groundskeepers	3	3	0	1	1
All Other Bindery Workers	3	3	0	0	0
All Other Skilled Craft Workers	6	6	0	1	1
All Other Operatives & Semiskilled Workers	22	23	1	2	3
All Other Laborers & Unskilled Workers	84	86	2	9	11
TOTAL CLERICAL WORKERS	1,423	1,458	35	299	334
Computer Operators	24	25	1	3	4
Keypunch Operators	31	31	0	7	7
Tabulating Machine Operators	4	4	0	1	1
All Other Office Machine Operators	1	1	0	0	0
Stenographers	19	20	1	4	5
Accounting Clerks	66	68	2	13	15
Bookkeepers, Hand	20	21	1	4	5
Cashiers	4	4	0	1	1
Claims Adjusters	1	1	0	0	0
Claims Clerks	3	3	0	1	1
General Office Clerks	149	153	4	32	36
Mail Clerks	42	43	1	7	8
Payroll &/or Timekeeping Clerks	33	33	0	6	6
Personnel Clerks	44	45	1	12	13
Procurement Clerks	11	12	1	1	2
Real Estate Clerks	1	1	0	0	0
Secretaries	200	205	5	45	50
Statistical Clerks	1	1	0	0	0
Switchboard Operators	17	18	1	5	6
Messengers	2	2	0	0	0
Travel Clerks	7	7	0	1	1
Typists	353	361	8	90	98
Clerical Supervisors, Office or Plant	11	12	1	1	2
Postal Service Clerks	31	31	0	4	4
All Other Office Clerical Workers	140	143	3	30	33
Production Clerks &/or Coordinators	4	4	0	0	0
Shipping Packers	1	1	0	0	0
Shipping &/or Receiving Clerks	7	7	0	1	1
Stock Clerks, Stockroom, Warehouse or Storage	15	16	1	2	3
Dispatchers, Vehicle, Service or Work	8	8	0	1	1
Postal Mail Carriers	80	82	2	7	9
All Other Plant Clerical Workers	93	95	2	20	22
TOTAL SALES WORKERS	25	25	0	3	3
Sales Clerks	25	25	0	3	3
TOTAL ALL OCCUPATIONS	4,321	4,424	103	611	714

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

COCONINO COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	134	137	3	20	23
Construction Inspectors	7	7	0	1	1
Postmasters &/or Mail Superintendents	9	9	0	2	2
Managers & Officers	118	121	3	17	20
TOTAL PROFESSIONAL WORKERS	657	675	18	71	89
Aeronautical Engineers	1	1	0	0	0
Agricultural Engineers	1	1	0	0	0
Civil Engineers	19	20	1	2	3
Electrical & Electronic Engineers	1	1	0	0	0
Mechanical Engineers	1	1	0	0	0
Safety Engineers	1	1	0	0	0
All Other Engineers	1	1	0	0	0
Mathematicians	4	4	0	1	1
Statisticians	1	1	0	0	0
Geologists & Geophysicists	57	59	2	5	7
All Other Physical Scientists	16	17	1	1	2
Agricultural Scientists	10	10	0	1	1
Biological Scientists	9	9	0	1	1
Foresters & Conservation Scientists	106	109	3	8	11
Economists	2	2	0	0	0
Psychologists	1	1	0	0	0
All Other Social Scientists	12	13	1	1	2
Systems Analysts, EDP	8	8	0	0	0
Teachers, Nonvocational Education	226	231	5	25	30
Photographers	8	8	0	1	1
Purchasing Agents &/or Buyers	18	19	1	2	3
Accountants & Auditors	5	5	0	1	1
Landscape Architects	4	4	0	0	0
Caseworkers	8	8	0	1	1
Commercial Artists	2	2	0	0	0
Dietitians &/or Nutritionists	1	1	0	0	0
Librarians, Professional	2	2	0	0	0
Curators, Museum	1	1	0	0	0
Nurses, Professional	59	61	2	11	13
Personnel & Labor Relations Specialists	11	11	0	1	1
Pharmacists	1	1	0	0	0
Physicians &/or Surgeons	1	1	0	0	0
Public Relations Practitioners	1	1	0	0	0
Tax Examiners, Collectors &/or Revenue Agents	4	4	0	1	1
Appraisers, Real Estate	1	1	0	0	0
Group Recreation Workers	18	19	1	3	4
Speech Pathologists &/or Audiologists	1	1	0	0	0
All Other Professional Workers	34	35	1	5	6
TOTAL TECHNICAL WORKERS	961	981	20	111	131
Computer Programmers	9	9	0	0	0
Drafters	1	1	0	0	0
Electrical & Electronic Technicians	12	13	1	1	2
Surveyors	26	26	0	2	2
All Other Engineering Technicians	43	44	1	5	6
Physical Science Technicians	53	54	1	5	6
Biological Science Technicians	375	383	8	41	49
Air Traffic Controllers	8	8	0	0	0
Dental Assistants	9	9	0	2	2
Mathematical Technicians	1	1	0	0	0
Physician's Assistants	4	4	0	1	1
Airplane Pilots	2	2	0	0	0
Technical Assistants, Library	3	3	0	1	1
Pharmacy Helpers	3	3	0	1	1
Medical Record Librarians	9	9	0	2	2
Dental Hygienists	1	1	0	0	0
Medical Laboratory Technologists	9	9	0	2	2

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

COCONINO COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Electrocardiograph Technicians	2	2	0	0	0
Radiologic &/or Nuclear Medical Technologists	5	5	0	1	1
All Other Medical & Dental Techs.	13	14	1	8	9
All Other Technicians	373	381	8	39	47
TOTAL SERVICE WORKERS	275	282	7	41	48
Janitors, Porters & Cleaners	51	52	1	9	10
Guards & Doorkeepers	34	35	1	2	3
Cooks, Institution or Cafeteria	51	52	1	8	9
All Other Food Service Workers	42	43	1	7	8
Housekeepers	2	2	0	0	0
Nurse's Aides &/or Orderlies	61	63	2	13	15
Guides, Sightseeing or Establishment	1	1	0	0	0
Social Service Aides	2	2	0	0	0
Occupational Therapy Assistants	1	1	0	0	0
Police/Detective Supervisors (Lieutenants, Sergeants, etc.)	9	9	0	0	0
Detectives, Police	10	10	0	1	1
Fire Fighters	11	12	1	1	2
TOTAL MAINTENANCE & PRODUCTION WORKERS	505	518	13	48	61
Mechanics, Automotive	8	8	0	1	1
Electric Tool Repairers	3	3	0	0	0
Electromedical Equipment Repairers	1	1	0	0	0
Engineering Equipment Mechanics	6	6	0	0	0
Hydroelectric Mechanics, Powerhouse/Gas Plant	14	15	1	1	2
Locksmiths	1	1	0	0	0
Mechanics, Maintenance	15	16	1	1	2
Refrigeration &/or Air Conditioning Mechanics	1	1	0	0	0
Electronic Mechanics	1	1	0	0	0
All Other Mechanics & Repairers	2	2	0	0	0
Truck Drivers	48	49	1	3	4
Blacksmiths	1	1	0	0	0
Carpenters	12	13	1	2	3
Crane, Derrick & Hoist Operators	1	1	0	0	0
Electricians	8	8	0	1	1
Supervisors, Nonworking	8	8	0	1	1
Heavy Equipment Operators	37	38	1	3	4
Industrial Truck Operators	1	1	0	0	0
Instrument Repairers	1	1	0	0	0
Line Installers/Repairers	6	6	0	0	0
Maintenance Repairers, General Utility	57	59	2	5	7
Painters, Maintenance	96	98	2	12	14
Plumbers &/or Pipefitters	4	4	0	0	0
Dental-Laboratory Technicians	1	1	0	0	0
Sewage Plant Operators	8	8	0	0	0
Stationary Engineers	15	16	1	2	3
Structural Steel Workers	1	1	0	0	0
Water Treatment Plant Operators	2	2	0	0	0
Welders &/or Flamecutters	1	1	0	0	0
Service Station/Fuel Pump Attendants	2	2	0	0	0
Fallers &/or Buckers	1	1	0	0	0
Loading Machine Operators	27	27	0	4	4
All Other Skilled Craft Workers	1	1	0	0	0
All Other Operatives & Semiskilled Workers	11	12	1	1	2
All Other Laborers & Unskilled Workers	103	105	2	11	13
TOTAL CLERICAL WORKERS	450	461	11	86	97
Computer Operators	10	10	0	1	1
Keypunch Operators	2	2	0	0	0
Stenographers	5	5	0	1	1
Accounting Clerks	28	28	0	5	5
Bookkeepers, Hand	3	3	0	1	1

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

COCONINO COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Cashiers	1	1	0	0	0
Claims Clerks	1	1	0	0	0
General Office Clerks	63	65	2	13	15
Mail Clerks	7	7	0	1	1
Payroll &/or Timekeeping Clerks	9	9	0	2	2
Personnel Clerks	12	13	1	3	4
Procurement Clerks	2	2	0	0	0
Real Estate Clerks	3	3	0	1	1
Receptionists	3	3	0	1	1
Secretaries	47	48	1	11	12
Statistical Clerks	1	1	0	0	0
Switchboard Operators	4	4	0	1	1
Travel Clerks	5	5	0	1	1
Typists	82	84	2	21	23
Clerical Supervisors, Office or Plant	1	1	0	0	0
Postal Service Clerks	37	38	1	5	6
All Other Office Clerical Workers	41	42	1	9	10
Production Clerks &/or Coordinators	1	1	0	0	0
Postal Mail Carriers	70	72	2	6	8
All Other Plant Clerical Workers	12	13	1	3	4
TOTAL ALL OCCUPATIONS	2,982	3,054	72	377	449

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

GILA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	24	25	1	4	5
Public Administration Inspectors	1	1	0	0	0
Postmasters &/or Mail Superintendents	13	14	1	3	4
Managers & Officers	10	10	0	1	1
TOTAL PROFESSIONAL WORKERS	67	68	1	8	9
Agricultural Scientists	1	1	0	0	0
Biological Scientists	2	2	0	0	0
Foresters & Conservation Scientists	31	31	0	2	2
Psychologists	1	1	0	0	0
Teachers, Nonvocational Education	6	6	0	1	1
Caseworkers	6	6	0	1	1
Nurses, Professional	14	15	1	3	4
Physicians &/or Surgeons	2	2	0	0	0
All Other Professional Workers	4	4	0	1	1
TOTAL TECHNICAL WORKERS	108	110	2	13	15
Electrical & Electronic Technicians	2	2	0	0	0
Surveyors	4	4	0	0	0
All Other Engineering Technicians	4	4	0	0	0
Biological Science Technicians	71	73	2	8	10
Dental Assistants	4	4	0	1	1
Physician's Assistants	2	2	0	0	0
Radio Operators	8	8	0	1	1
Medical Record Librarians	6	6	0	1	1
Medical Laboratory Technologists	3	3	0	1	1
Radiologic &/or Nuclear Medical Technologists	1	1	0	0	0
All Other Medical & Dental Techs.	1	1	0	1	1
All Other Technicians	2	2	0	0	0
TOTAL SERVICE WORKERS	76	78	2	8	10
Janitors, Porters & Cleaners	4	4	0	1	1
Guards & Doorkeepers	1	1	0	0	0
Cooks, Institution or Cafeteria	6	6	0	1	1
All Other Food Service Workers	2	2	0	0	0
Nurse's Aides &/or Orderlies	14	15	1	3	4
Forest Conservation Workers	34	34	0	2	2
Police/Detective Supervisors (Lieutenants, Sergeants, etc.)	13	14	1	1	2
Detectives, Police	2	2	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	65	66	1	5	6
Mechanics, Automotive	1	1	0	0	0
Engineering Equipment Mechanics	4	4	0	0	0
Hydroelectric Mechanics, Powerhouse/Gas Plant	1	1	0	0	0
Mechanics, Maintenance	1	1	0	0	0
Truck Drivers	2	2	0	0	0
Carpenters	2	2	0	0	0
Supervisors, Nonworking	1	1	0	0	0
Heavy Equipment Operators	11	12	1	1	2
Maintenance Repairers, General Utility	5	5	0	0	0
Plumbers &/or Pipefitters	1	1	0	0	0
Stationary Boiler Firers	1	1	0	0	0
Stationary Engineers	5	5	0	1	1
All Other Laborers & Unskilled Workers	30	30	0	3	3
TOTAL CLERICAL WORKERS	93	95	2	13	15
Accounting Clerks	2	2	0	0	0
Cashiers	2	2	0	0	0
Claims Clerks	1	1	0	0	0
General Office Clerks	11	11	0	2	2
Payroll &/or Timekeeping Clerks	4	4	0	1	1
Real Estate Clerks	2	2	0	0	0

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

GILA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Secretaries	4	4	0	1	1
Typists	13	14	1	3	4
Postal Service Clerks	12	13	1	2	3
All Other Office Clerical Workers	7	7	0	1	1
Postal Mail Carriers	34	34	0	3	3
All Other Plant Clerical Workers	1	1	0	0	0
TOTAL ALL OCCUPATIONS	433	442	9	51	60

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

GRAHAM AND GREENLEE COUNTIES

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	33	34	1	5	6
Construction Inspectors	1	1	0	0	0
Postmasters &/or Mail Superintendents	9	9	0	2	2
Managers & Officers	23	24	1	3	4
TOTAL PROFESSIONAL WORKERS	45	46	1	2	3
Civil Engineers	3	3	0	0	0
Geologists & Geophysicists	3	3	0	0	0
Biological Scientists	7	7	0	1	1
Foresters & Conservation Scientists	20	21	1	1	2
Urban & Regional Planners	1	1	0	0	0
All Other Social Scientists	5	5	0	0	0
Teachers, Nonvocational Education	4	4	0	0	0
Personnel & Labor Relations Specialists	1	1	0	0	0
All Other Professional Workers	1	1	0	0	0
TOTAL TECHNICAL WORKERS	43	44	1	4	5
Electrical & Electronic Technicians	2	2	0	0	0
All Other Engineering Technicians	4	4	0	0	0
Biological Science Technicians	36	37	1	4	5
Physician's Assistants	1	1	0	0	0
TOTAL SERVICE WORKERS	26	27	1	4	5
Kitchen Helpers	1	1	0	0	0
Cooks, Institution or Cafeteria	4	4	0	0	0
Supervisors, Nonworking-Service	1	1	0	0	0
Medical Assistants	2	2	0	0	0
Police/Detective Supervisors (Lieutenants, Sergeants, etc.)	1	1	0	0	0
Correction Officers &/or Jailers	17	18	1	4	5
TOTAL MAINTENANCE & PRODUCTION WORKERS	13	13	0	0	0
Mechanics, Automotive	1	1	0	0	0
Mechanics, Maintenance	2	2	0	0	0
Electricians	1	1	0	0	0
Maintenance Repairers, General Utility	2	2	0	0	0
Sewing Machine Operators, Regular Equipment	1	1	0	0	0
Stationary Boiler Firers	1	1	0	0	0
Stationary Engineers	1	1	0	0	0
All Other Laborers & Unskilled Workers	4	4	0	0	0
TOTAL CLERICAL WORKERS	70	71	1	9	10
Stenographers	3	3	0	1	1
Accounting Clerks	2	2	0	0	0
Claims Clerks	1	1	0	0	0
General Office Clerks	12	12	0	2	2
Payroll &/or Timekeeping Clerks	1	1	0	0	0
Personnel Clerks	1	1	0	0	0
Real Estate Clerks	1	1	0	0	0
Secretaries	1	1	0	0	0
Typists	11	11	0	2	2
Postal Service Clerks	10	10	0	1	1
All Other Office Clerical Workers	5	5	0	1	1
Postal Mail Carriers	22	23	1	2	3
TOTAL ALL OCCUPATIONS	230	235	5	24	29

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

MARICOPA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	913	956	43	132	175
Public Administration Inspectors	177	185	8	24	32
Construction Inspectors	56	58	2	9	11
Postmasters &/or Mail Superintendents	26	28	2	6	8
Managers & Officers	654	685	31	93	124
TOTAL PROFESSIONAL WORKERS	2,515	2,628	113	348	461
Aeronautical Engineers	5	5	0	0	0
Agricultural Engineers	4	4	0	0	0
Civil Engineers	123	129	6	16	22
Electrical & Electronic Engineers	37	39	2	2	4
Industrial Engineers	3	3	0	0	0
Mechanical Engineers	5	5	0	0	0
Mining Engineers	6	6	0	1	1
Safety Engineers	2	2	0	0	0
Nuclear Engineers	1	1	0	0	0
All Other Engineers	26	28	2	2	4
Mathematicians	2	2	0	0	0
Statisticians	7	7	0	1	1
All Other Mathematical Scientists	3	3	0	1	1
Chemists	9	9	0	1	1
Geologists & Geophysicists	36	38	2	3	5
Meteorologists	16	16	0	1	1
Physicists	4	4	0	0	0
All Other Physical Scientists	2	2	0	0	0
Agricultural Scientists	27	29	2	4	6
Biological Scientists	92	96	4	10	14
Foresters & Conservation Scientists	61	63	2	4	6
Economists	13	13	0	1	1
Psychologists	31	33	2	3	5
Sociologists	1	1	0	0	0
Urban & Regional Planners	3	3	0	0	0
All Other Social Scientists	18	18	0	1	1
Systems Analysts, EDP	21	23	2	1	3
Teachers, Nonvocational Education	103	108	5	11	16
Photographers	3	3	0	0	0
Purchasing Agents &/or Buyers	114	120	6	15	21
Accountants & Auditors	89	93	4	13	17
Landscape Architects	4	4	0	1	1
Architects	7	7	0	1	1
Caseworkers	36	38	2	6	8
Clergy	11	11	0	2	2
Commercial Artists	3	3	0	1	1
Dentists	6	6	0	1	1
Dietitians &/or Nutritionists	15	15	0	3	3
Writers &/or Editors	7	7	0	1	1
Law Clerks	48	50	2	5	7
Lawyers	80	84	4	9	13
Librarians, Professional	5	5	0	1	1
Nurses, Professional	436	457	21	83	104
Occupational Therapists	3	3	0	0	0
Paralegal Personnel	4	4	0	0	0
Personnel & Labor Relations Specialists	111	117	6	13	19
Pharmacists	27	29	2	6	8
Physical Therapists	4	4	0	1	1
Physicians &/or Surgeons	177	185	8	26	34
Podiatrists	1	1	0	0	0
Public Relations Practitioners	10	10	0	1	1
Veterinarians	11	11	0	1	1
Judges	19	19	0	5	5
Tax Examiners, Collectors &/or Revenue Agents	181	189	8	27	35
Appraisers, Real Estate	34	36	2	7	9
Group Recreation Workers	3	3	0	0	0
Manual Arts, Music &/or Recreation Therapists	3	3	0	0	0

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

MARICOPA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Speech Pathologists &/or Audiologists	8	8	0	1	1
Corrective Therapists	1	1	0	0	0
All Other Professional Workers	393	412	19	55	74
TOTAL TECHNICAL WORKERS	1,007	1,055	48	116	164
Computer Programmers	15	15	0	1	1
Drafters	33	35	2	3	5
Electrical & Electronic Technicians	69	73	4	4	8
Surveyors	41	43	2	3	5
Broadcast Technicians	4	4	0	0	0
All Other Engineering Technicians	139	145	6	15	21
Physical Science Technicians	25	27	2	2	4
Biological Science Technicians	147	154	7	16	23
Air Traffic Controllers	176	184	8	7	15
Dental Assistants	21	22	1	6	7
Mathematical Technicians	1	1	0	0	0
Physician's Assistants	4	4	0	1	1
Airplane Pilots	21	22	1	1	2
Radio Operators	2	2	0	0	0
Technical Assistants, Library	5	5	0	1	1
Pharmacy Helpers	14	14	0	3	3
Medical Record Librarians	16	16	0	4	4
Dental Hygienists	1	1	0	0	0
Medical Laboratory Technologists	65	69	4	12	16
Electrocardiograph Technicians	35	37	2	5	7
Radiologic &/or Nuclear Medical Technologists	21	22	1	3	4
All Other Medical & Dental Techs.	27	29	2	16	18
All Other Technicians	125	131	6	13	19
TOTAL SERVICE WORKERS	883	926	43	128	171
Janitors, Porters & Cleaners	141	147	6	25	31
Guards & Doorkeepers	29	31	2	2	4
Bakers, Bread &/or Pastry	1	1	0	0	0
Butchers &/or Meat Cutters	30	32	2	3	5
Cooks, Institution or Cafeteria	41	43	2	6	8
All Other Food Service Workers	104	109	5	19	24
Barbers	1	1	0	0	0
Supervisors, Nonworking-Service	1	1	0	0	0
Housekeepers	2	2	0	0	0
Nurse's Aides &/or Orderlies	241	253	12	52	64
Forest Conservation Workers	1	1	0	0	0
Fish & Game Wardens	1	1	0	0	0
Social Service Aides	1	1	0	0	0
Occupational Therapy Assistants	3	3	0	1	1
Police/Detective Supervisors (Lieutenants, Sergeants, etc.)	28	30	2	2	4
Detectives, Police	170	178	8	9	17
Correction Officers &/or Jailers	6	6	0	1	1
U.S. Marshalls	22	24	2	5	7
Fire Fighters	59	61	2	3	5
All Other Service Workers	1	1	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	1,532	1,598	66	137	203
Mechanics, Aircraft	244	256	12	14	26
Mechanics, Automotive	48	50	2	4	6
Body Repairers, Automotive	2	2	0	0	0
Camera &/or Motion Picture Repairers	1	1	0	0	0
Electric Tool Repairers	5	5	0	0	0
Electrical Instrument Repairers	10	10	0	1	1
Electromedical Equipment Mechanics	7	7	0	1	1
Engineering Equipment Mechanics	29	31	2	2	4
Hydroelectric Mechanics, Powerhouse/Gas Plant	15	15	0	1	1
Laundry Machine Mechanics	1	1	0	0	0
Locksmiths	2	2	0	0	0

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

MARICOPA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Mechanics, Maintenance	103	108	5	9	14
Refrigeration &/or Air Conditioning Mechanics	50	52	2	5	7
Car Repairers, Railroad	1	1	0	0	0
Electronic Mechanics	85	89	4	5	9
Data Processing Machine Repairers	1	1	0	0	0
All Other Mechanics & Repairers	49	51	2	4	6
Markers, Classifiers &/or Assemblers	18	18	0	4	4
Washers, Machine &/or Starchers	2	2	0	0	0
Dry Cleaning Machine Operators	1	1	0	0	0
Truck Drivers	99	103	4	7	11
Cabinetmakers	8	8	0	1	1
Cable Splicers	7	7	0	0	0
Carpenters	28	30	2	4	6
Cement Masons	1	1	0	0	0
Crane, Derrick & Hoist Operators	2	2	0	0	0
Craters	7	7	0	1	1
Electricians	42	44	2	4	6
Exterminators	1	1	0	0	0
Supervisors, Nonworking	16	16	0	2	2
Heavy Equipment Operators	19	19	0	2	2
Industrial Truck Operators	37	39	2	3	5
Inspectors	12	12	0	2	2
Line Installers/Repairers	22	24	2	1	3
Maintenance Repairers, General Utility	59	61	2	5	7
Painters, Maintenance	29	31	2	4	6
Electroplaters	1	1	0	0	0
Plumbers &/or Pipefitters	23	25	2	2	4
Rotary Drill Operators	21	22	1	2	3
Dental-Laboratory Technicians	2	2	0	0	0
Sewage Plant Operators	5	5	0	0	0
Sewing Machine Operators, Regular Equipment	1	1	0	0	0
Sheet Metal Workers	27	29	2	2	4
Stationary Boiler Firers	3	3	0	0	0
Stationary Engineers	12	12	0	1	1
Stone Masons	1	1	0	0	0
Substation Operators	1	1	0	0	0
Animal Caretakers	33	35	2	7	9
Tire Fabricators &/or Repairers	1	1	0	0	0
Tool & Die Makers	3	3	0	0	0
Water Treatment Plant Operators	4	4	0	0	0
Welders &/or Flamecutters	15	15	0	2	2
Offset Lithographic Press Operators	5	5	0	1	1
Service Station/Fuel Pump Attendants	3	3	0	0	0
Stock Clerks, Sales Floor	2	2	0	0	0
Highway Maintenance Workers	3	3	0	0	0
Machine Tool Operators, Combination	10	10	0	1	1
Testers	5	5	0	1	1
Painters, Production	1	1	0	0	0
Loading Machine Operators	1	1	0	0	0
Gardeners & Groundskeepers	6	6	0	1	1
All Other Bindery Workers	1	1	0	0	0
All Other Skilled Craft Workers	1	1	0	0	0
All Other Operatives & Semiskilled Workers	30	32	2	3	5
All Other Laborers & Unskilled Workers	248	260	12	28	40
TOTAL CLERICAL WORKERS	6,019	6,303	284	852	1,136
Computer Operators	11	11	0	1	1
Keypunch Operators	34	36	2	7	9
All Other Office Machine Operators	8	8	0	2	2
Stenographers	121	127	6	25	31
Accounting Clerks	138	144	6	27	33
Bookkeepers, Hand	20	20	0	4	4
Cashiers	12	12	0	2	2
Claims Adjusters	45	47	2	5	7

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

MARICOPA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Claims Clerks	91	95	4	19	23
General Office Clerks	471	494	23	101	124
Mail Clerks	60	62	2	10	12
Payroll &/or Timekeeping Clerks	22	24	2	4	6
Personnel Clerks	103	108	5	28	33
Procurement Clerks	44	46	2	5	7
Real Estate Clerks	37	39	2	8	10
Receptionists	9	9	0	2	2
Secretaries	277	291	14	63	77
Statistical Clerks	8	8	0	2	2
Switchboard Operators	60	62	2	16	18
Travel Clerks	5	5	0	1	1
Typists	353	370	17	90	107
Clerical Supervisors, Office or Plant	17	17	0	2	2
Postal Service Clerks	361	379	18	44	62
All Other Office Clerical Workers	346	362	16	74	90
Production Clerks &/or Coordinators	12	12	0	1	1
Shipping Packers	1	1	0	0	0
Shipping &/or Receiving Clerks	10	10	0	1	1
Stock Clerks, Stockroom, Warehouse or Storage	17	17	0	2	2
Dispatchers, Vehicle, Service or Work	8	8	0	1	1
Postal Mail Carriers	3,209	3,364	155	282	437
All Other Plant Clerical Workers	109	115	6	23	29
TOTAL SALES WORKERS	79	83	4	10	14
Sales Clerks	79	83	4	10	14
TOTAL ALL OCCUPATIONS	12,948	13,549	601	1,723	2,324

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

MOHAVE COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	39	39	0	6	6
Construction Inspectors	1	1	0	0	0
Postmasters &/or Mail Superintendents	11	11	0	2	2
Managers & Officers	27	27	0	4	4
TOTAL PROFESSIONAL WORKERS	23	24	1	1	2
Electrical & Electronic Engineers	2	2	0	0	0
Geologists & Geophysicists	1	1	0	0	0
Agricultural Scientists	1	1	0	0	0
Biological Scientists	11	12	1	1	2
Foresters & Conservation Scientists	3	3	0	0	0
Purchasing Agents &/or Buyers	1	1	0	0	0
Caseworkers	1	1	0	0	0
Nurses, Professional	2	2	0	0	0
All Other Professional Workers	1	1	0	0	0
TOTAL TECHNICAL WORKERS	27	28	1	2	3
Electrical & Electronic Technicians	1	1	0	0	0
Surveyors	1	1	0	0	0
All Other Engineering Technicians	1	1	0	0	0
Biological Science Technicians	22	23	1	2	3
Medical Record Librarians	1	1	0	0	0
All Other Technicians	1	1	0	0	0
TOTAL SERVICE WORKERS	8	8	0	0	0
Janitors, Porters & Cleaners	1	1	0	0	0
Nurse's Aides &/or Orderlies	1	1	0	0	0
Police/Detective Supervisors (Lieutenants, Sergeants, etc.)	3	3	0	0	0
Detectives, Police	2	2	0	0	0
U.S. Marshalls	1	1	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	69	71	2	6	8
Mechanics, Automotive	1	1	0	0	0
Engineering Equipment Mechanics	1	1	0	0	0
Hydroelectric Mechanics, Powerhouse/Gas Plant	11	12	1	1	2
Mechanics, Maintenance	4	4	0	0	0
Truck Drivers	2	2	0	0	0
Carpenters	4	4	0	0	0
Electricians	1	1	0	0	0
Supervisors, Nonworking	4	4	0	0	0
Heavy Equipment Operators	7	7	0	1	1
Industrial Truck Operators	1	1	0	0	0
Maintenance Repairers, General Utility	8	8	0	1	1
Oilers	1	1	0	0	0
Painters, Maintenance	1	1	0	0	0
Rotary Drill Operators	1	1	0	0	0
Stationary Boiler Firers	1	1	0	0	0
Stationary Engineers	5	5	0	1	1
Water Treatment Plant Operators	1	1	0	0	0
All Other Laborers & Unskilled Workers	15	16	1	2	3
TOTAL CLERICAL WORKERS	101	102	1	11	12
Accounting Clerks	1	1	0	0	0
General Office Clerks	11	11	0	2	2
Real Estate Clerks	1	1	0	0	0
Secretaries	4	4	0	1	1
Typists	5	5	0	1	1
Postal Service Clerks	26	26	0	3	3
All Other Office Clerical Workers	2	2	0	0	0
Postal Mail Carriers	51	52	1	4	5
TOTAL ALL OCCUPATIONS	267	272	5	26	31

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

NAVAJO COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	60	62	2	10	12
Construction Inspectors	3	3	0	0	0
Postmasters &/or Mail Superintendents	21	22	1	5	6
Managers & Officers	36	37	1	5	6
TOTAL PROFESSIONAL WORKERS	518	529	11	61	72
All Engineers	1	1	0	0	0
Agricultural Scientists	1	1	0	0	0
Biological Scientists	10	10	0	1	1
Foresters & Conservation Scientists	47	48	1	3	4
Teachers, Nonvocational Education	323	330	7	35	42
Purchasing Agents &/or Buyers	2	2	0	0	0
Caseworkers	11	12	1	2	3
Dietitians &/or Nutritionists	1	1	0	0	0
Librarians, Professional	2	2	0	0	0
Nurses, Professional	74	75	1	14	15
Personnel & Labor Relations Specialists	2	2	0	0	0
Physical Therapists	1	1	0	0	0
Physicians &/or Surgeons	3	3	0	0	0
Veterinarians	1	1	0	0	0
Group Recreation Workers	28	28	0	4	4
All Other Professional Workers	11	12	1	2	3
TOTAL TECHNICAL WORKERS	719	735	16	86	102
Electrical & Electronic Technicians	2	2	0	0	0
Surveyors	9	9	0	1	1
Broadcast Technicians	2	2	0	0	0
All Other Engineering Technicians	11	11	0	1	1
Physical Science Technicians	6	6	0	0	0
Biological Science Technicians	125	127	2	14	16
Dental Assistants	19	20	1	5	6
Physician's Assistants	7	7	0	2	2
Radio Operators	4	4	0	0	0
Technical Assistants, Library	2	2	0	0	0
Pharmacy Helpers	4	4	0	1	1
Medical Record Librarians	13	14	1	3	4
Medical Laboratory Technologists	15	16	1	3	4
Radiologic &/or Nuclear Medical Technologists	6	6	0	1	1
All Other Medical & Dental Techs.	7	7	0	4	4
All Other Technicians	487	498	11	51	62
TOTAL SERVICE WORKERS	490	502	12	59	71
Janitors, Porters & Cleaners	53	54	1	9	10
Guards & Doorkeepers	7	7	0	0	0
Cooks, Institution or Cafeteria	71	73	2	11	13
All Other Food Service Workers	39	40	1	7	8
Nurse's Aides &/or Orderlies	67	69	2	14	16
Forest Conservation Workers	221	226	5	16	21
Guides, Sightseeing or Establishment	1	1	0	0	0
Social Service Aides	3	3	0	1	1
Police/Detective Supervisors (Lieutenants, Sergeants, etc.)	24	25	1	1	2
Detectives, Police	4	4	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	314	321	7	28	35
Mechanics, Automotive	6	6	0	0	0
Engineering Equipment Mechanics	5	5	0	0	0
Mechanics, Maintenance	3	3	0	0	0
Refrigeration &/or Air Conditioning Mechanics	1	1	0	0	0
Electronic Mechanics	1	1	0	0	0
Truck Drivers	67	69	2	5	7
Carpenters	3	3	0	0	0
Electricians	4	4	0	0	0

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

NAVAJO COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Supervisors, Nonworking	9	9	0	1	1
Heavy Equipment Operators	42	43	1	4	5
Maintenance Repairers, General Utility	48	49	1	4	5
Painters, Maintenance	7	7	0	1	1
Plumbers &/or Pipefitters	1	1	0	0	0
Stationary Boiler Firers	4	4	0	0	0
Stationary Engineers	3	3	0	0	0
Animal Caretakers	10	10	0	2	2
Welders &/or Flamecutters	3	3	0	0	0
Gardeners & Groundskeepers	12	13	1	2	3
All Other Operatives & Semiskilled Workers	12	13	1	1	2
All Other Laborers & Unskilled Workers	73	74	1	8	9
TOTAL CLERICAL WORKERS	233	237	4	45	49
Accounting Clerks	4	4	0	1	1
General Office Clerks	27	27	0	6	6
Mail Clerks	1	1	0	0	0
Payroll &/or Timekeeping Clerks	1	1	0	0	0
Personnel Clerks	3	3	0	1	1
Procurement Clerks	1	1	0	0	0
Real Estate Clerks	1	1	0	0	0
Receptionists	1	1	0	0	0
Secretaries	38	39	1	9	10
Switchboard Operators	2	2	0	1	1
Typists	49	50	1	12	13
Clerical Supervisors, Office or Plant	1	1	0	0	0
Postal Service Clerks	24	25	1	3	4
All Other Office Clerical Workers	31	31	0	7	7
Weighers, Recordkeeping	2	2	0	0	0
Postal Mail Carriers	39	40	1	3	4
All Other Plant Clerical Workers	8	8	0	2	2
TOTAL SALES WORKERS	1	1	0	0	0
Sales Clerks	1	1	0	0	0
TOTAL ALL OCCUPATIONS	2,335	2,387	52	289	341

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

PIMA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	362	366	4	52	56
Public Administration Inspectors	109	110	1	15	16
Construction Inspectors	7	7	0	1	1
Postmasters &/or Mail Superintendents	13	13	0	3	3
Managers & Officers	233	236	3	33	36
TOTAL PROFESSIONAL WORKERS	1,041	1,059	18	138	156
Aeronautical Engineers	1	1	0	0	0
Civil Engineers	16	17	1	2	3
Electrical & Electronic Engineers	1	1	0	0	0
Industrial Engineers	6	6	0	0	0
Mechanical Engineers	3	3	0	0	0
All Other Engineers	15	15	0	1	1
Mathematicians	3	3	0	1	1
Statisticians	1	1	0	0	0
All Other Mathematical Scientists	3	3	0	1	1
Chemists	2	2	0	0	0
Geologists & Geophysicists	50	51	1	4	5
Meteorologists	1	1	0	0	0
Physicists	1	1	0	0	0
All Other Physical Scientists	6	6	0	0	0
Agricultural Scientists	9	9	0	1	1
Biological Scientists	39	39	0	4	4
Foresters & Conservation Scientists	20	21	1	1	2
Economists	7	7	0	1	1
Psychologists	11	11	0	1	1
Urban & Regional Planners	1	1	0	0	0
All Other Social Scientists	19	20	1	1	2
Systems Analysts, EDP	16	17	1	1	2
Teachers, Nonvocational Education	83	85	2	9	11
Photographers	4	4	0	0	0
Purchasing Agents &/or Buyers	39	39	0	5	5
Accountants & Auditors	28	29	1	4	5
Landscape Architects	4	4	0	0	0
Architects	1	1	0	0	0
Caseworkers	17	18	1	3	4
Clergy	5	5	0	1	1
Commercial Artists	5	5	0	1	1
Dentists	2	2	0	0	0
Dietitians &/or Nutritionists	8	8	0	2	2
Writers &/or Editors	8	8	0	1	1
Law Clerks	17	18	1	2	3
Lawyers	14	14	0	1	1
Librarians, Professional	2	2	0	0	0
Curators, Museum	1	1	0	0	0
Nurses, Professional	184	187	3	35	38
Occupational Therapists	2	2	0	0	0
Optometrists	1	1	0	0	0
Paralegal Personnel	1	1	0	0	0
Personnel & Labor Relations Specialists	38	38	0	4	4
Pharmacists	12	12	0	2	2
Physical Therapists	4	4	0	1	1
Physicians &/or Surgeons	145	147	2	21	23
Podiatrists	3	3	0	1	1
Public Relations Practitioners	2	2	0	0	0
Veterinarians	1	1	0	0	0
Judges	2	2	0	1	1
Tax Examiners, Collectors &/or Revenue Agents	53	54	1	8	9
Appraisers, Real Estate	2	2	0	0	0
Group Recreation Workers	1	1	0	0	0
Manual Arts, Music &/or Recreation Therapists	1	1	0	0	0
Speech Pathologists &/or Audiologists	4	4	0	1	1
Corrective Therapists	2	2	0	0	0
All Other Professional Workers	114	116	2	16	18

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

PIMA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL TECHNICAL WORKERS	577	587	10	69	79
Computer Programmers	11	11	0	1	1
Drafters	2	2	0	0	0
Electrical & Electronic Technicians	34	34	0	2	2
Surveyors	8	8	0	0	0
Broadcast Technicians	8	8	0	0	0
All Other Engineering Technicians	32	33	1	3	4
Physical Science Technicians	15	15	0	1	1
Biological Science Technicians	104	105	1	11	12
Air Traffic Controllers	81	83	2	3	5
Dental Assistants	9	9	0	2	2
Physician's Assistants	4	4	0	1	1
Airplane Pilots	34	34	0	2	2
Technical Assistants, Library	5	5	0	1	1
Pharmacy Helpers	10	10	0	2	2
Medical Record Librarians	21	22	1	5	6
Medical Laboratory Technologists	39	39	0	7	7
Prosthetists/Orthotists	2	2	0	0	0
Electrocardiograph Technicians	26	27	1	4	5
Radiologic &/or Nuclear Medical Technologists	21	22	1	3	4
All Other Medical & Dental Techs.	18	19	1	11	12
All Other Technicians	93	95	2	10	12
TOTAL SERVICE WORKERS	450	459	9	66	75
Janitors, Porters & Cleaners	75	76	1	13	14
Guards & Doorkeepers	8	8	0	0	0
Bakers, Bread &/or Pastry	1	1	0	0	0
Butchers &/or Meat Cutters	20	21	1	2	3
Cooks, Institution or Cafeteria	17	18	1	3	4
All Other Food Service Workers	55	56	1	10	11
Barbers	1	1	0	0	0
Housekeepers	2	2	0	0	0
Nurse's Aides &/or Orderlies	125	127	2	27	29
Social Service Aides	3	3	0	1	1
Medical Assistants	1	1	0	0	0
Occupational Therapy Assistants	2	2	0	0	0
Police/Detective Supervisors (Lieutenants, Sergeants, etc.)	26	27	1	1	2
Detectives, Police	61	62	1	3	4
U.S. Marshalls	17	18	1	4	5
Fire Fighters	36	36	0	2	2
TOTAL MAINTENANCE & PRODUCTION WORKERS	1,166	1,183	17	99	116
Mechanics, Aircraft	276	281	5	16	21
Mechanics, Automotive	34	34	0	3	3
Body Repairers, Automotive	2	2	0	0	0
Electric Tool Repairers	2	2	0	0	0
Electromedical Equipment Repairers	1	1	0	0	0
Engineering Equipment Mechanics	16	16	0	1	1
Locksmiths	1	1	0	0	0
Mechanics, Maintenance	30	31	1	3	4
Refrigeration &/or Air Conditioning Mechanics	31	32	1	3	4
Electronic Mechanics	61	62	1	3	4
Gas & Electronic Appliance Repairers	2	2	0	0	0
All Other Mechanics & Repairers	52	53	1	5	6
Markers, Classifiers &/or Assemblers	1	1	0	0	0
Truck Drivers	63	64	1	5	6
Cabinetmakers	1	1	0	0	0
Cable Splicers	2	2	0	0	0
Carpenters	34	34	0	4	4
Cement Masons	1	1	0	0	0
Crane, Derrick & Hoist Operators	5	5	0	0	0
Craters	24	25	1	3	4

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

PIMA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Electricians	35	35	0	3	3
Exterminators	1	1	0	0	0
Supervisors, Nonworking	11	11	0	1	1
Heavy Equipment Operators	17	18	1	1	2
Riggers	2	2	0	0	0
Industrial Truck Operators	35	35	0	3	3
Inspectors	16	16	0	2	2
Maintenance Repairers, General Utility	37	37	0	3	3
Oilers	2	2	0	0	0
Painters, Maintenance	55	56	1	7	8
Plasterers	2	2	0	0	0
Plumbers &/or Pipefitters	17	18	1	2	3
Roofers	1	1	0	0	0
Dental-Laboratory Technicians	1	1	0	0	0
Sandblasters &/or Shotblasters	4	4	0	0	0
Sheet Metal Workers	15	15	0	1	1
Stationary Boiler Firers	6	6	0	1	1
Stationary Engineers	2	2	0	0	0
Stone Masons	1	1	0	0	0
Track Layers	1	1	0	0	0
Welders &/or Flamecutters	4	4	0	0	0
Offset Lithographic Press Operators	3	3	0	0	0
Service Station/Fuel Pump Attendants	3	3	0	0	0
Stock Clerks, Sales Floor	1	1	0	0	0
Highway Maintenance Workers	3	3	0	0	0
Machine Tool Operators, Combination	4	4	0	1	1
Testers	5	5	0	1	1
Loading Machine Operators	2	2	0	0	0
Upholsterers	1	1	0	0	0
Gardeners & Groundskeepers	5	5	0	1	1
All Other Skilled Craft Workers	2	2	0	0	0
All Other Operatives & Semiskilled Workers	65	66	1	7	8
All Other Laborers & Unskilled Workers	168	170	2	19	21
TOTAL CLERICAL WORKERS	1,899	1,928	29	284	313
Computer Operators	11	11	0	1	1
Keypunch Operators	22	23	1	5	6
All Other Office Machine Operators	2	2	0	1	1
Stenographers	35	35	0	7	7
Accounting Clerks	43	43	0	8	8
Bookkeepers, Hand	6	6	0	1	1
Cashiers	3	3	0	1	1
Claims Adjusters	1	1	0	0	0
Claims Clerks	25	26	1	5	6
Correspondence Clerks	2	2	0	0	0
General Office Clerks	161	164	3	34	37
Mail Clerks	13	13	0	2	2
Payroll &/or Timekeeping Clerks	16	16	0	3	3
Personnel Clerks	26	27	1	7	8
Procurement Clerks	8	8	0	1	1
Real Estate Clerks	1	1	0	0	0
Receptionists	4	4	0	1	1
Secretaries	141	143	2	32	34
Statistical Clerks	5	5	0	1	1
Switchboard Operators	10	10	0	3	3
Messengers	2	2	0	0	0
Travel Clerks	1	1	0	0	0
Typists	131	133	2	33	35
Clerical Supervisors, Office or Plant	5	5	0	1	1
Postal Service Clerks	110	111	1	13	14
All Other Office Clerical Workers	148	151	3	31	34
Production Clerks &/or Coordinators	30	31	1	3	4
Shipping Packers	7	7	0	1	1

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

PIMA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Shipping &/or Receiving Clerks	1	1	0	0	0
Stock Clerks, Stockroom, Warehouse or Storage	3	3	0	0	0
Dispatchers, Vehicle, Service or Work	1	1	0	0	0
Postal Mail Carriers	852	865	13	74	87
All Other Plant Clerical Workers	73	74	1	15	16
TOTAL SALES WORKERS	39	39	0	5	5
Sales Clerks	39	39	0	5	5
TOTAL ALL OCCUPATIONS	5,534	5,621	87	713	800

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

PINAL COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	50	51	1	9	10
Public Administration Inspectors	5	5	0	1	1
Construction Inspectors	1	1	0	0	0
Postmasters &/or Mail Superintendents	15	16	1	4	5
Managers & Officers	29	29	0	4	4
TOTAL PROFESSIONAL WORKERS	63	64	1	9	10
Agricultural Engineers	1	1	0	0	0
Civil Engineers	2	2	0	0	0
Electrical & Electronic Engineers	1	1	0	0	0
All Other Engineers	2	2	0	0	0
Agricultural Scientists	2	2	0	0	0
Biological Scientists	10	10	0	1	1
Foresters & Conservation Scientists	5	5	0	0	0
All Other Social Scientists	1	1	0	0	0
Teachers, Nonvocational Education	6	6	0	1	1
Caseworkers	6	6	0	1	1
Nurses, Professional	15	16	1	3	4
Physicians &/or Surgeons	4	4	0	1	1
Pharmacists	4	4	0	1	1
All Other Professional Workers	4	4	0	1	1
TOTAL TECHNICAL WORKERS	46	47	1	6	7
Drafters	1	1	0	0	0
Surveyors	11	11	0	1	1
All Other Engineering Technicians	2	2	0	0	0
Physical Science Technicians	1	1	0	0	0
Biological Science Technicians	12	13	1	1	2
Dental Assistants	2	2	0	1	1
Physician's Assistants	2	2	0	0	0
Medical Record Librarians	2	2	0	0	0
Medical Laboratory Technologists	3	3	0	1	1
Radiologic &/or Nuclear Medical Technologists	1	1	0	0	0
All Other Medical & Dental Techs.	1	1	0	1	1
All Other Technicians	8	8	0	1	1
TOTAL SERVICE WORKERS	65	67	2	11	13
Janitors, Porters & Cleaners	5	5	0	1	1
Cooks, Institution or Cafeteria	7	7	0	1	1
All Other Food Service Workers	1	1	0	0	0
Supervisors, Nonworking-Service	1	1	0	0	0
Nurse's Aides &/or Orderlies	13	14	1	3	4
Medical Assistants	1	1	0	0	0
Police/Detective Supervisors (Lieutenants, Sergeants, etc.)	11	11	0	1	1
Detectives, Police	4	4	0	0	0
Correction Officers &/or Jailers	21	22	1	5	6
All Other Service Workers	1	1	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	140	145	5	8	13
Mechanics, Automotive	5	5	0	0	0
Engineering Equipment Mechanics	4	4	0	0	0
Hydroelectric Mechanics, Powerhouse/Gas Plant	15	16	1	1	2
Mechanics, Maintenance	16	17	1	1	2
Refrigeration &/or Air Conditioning Mechanics	1	1	0	0	0
Truck Drivers	5	5	0	0	0
Carpenters	1	1	0	0	0
Crane, Derrick & Hoist Operators	4	4	0	0	0
Electricians	2	2	0	0	0
Supervisors, Nonworking	6	6	0	1	1
Heavy Equipment Operators	15	16	1	1	2
Line Installers/Repairers	19	20	1	1	2
Maintenance Repairers, General Utility	8	8	0	1	1

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

PINAL COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Oilers	2	2	0	0	0
Painters, Maintenance	1	1	0	0	0
Plumbers &/or Pipefitters	2	2	0	0	0
Rotary Drill Operators	4	4	0	0	0
Substation Operators	5	5	0	0	0
Welders &/or Flamecutters	1	1	0	0	0
Service Station/Fuel Pump Attendants	1	1	0	0	0
Machine Tool Operators, Combination	2	2	0	0	0
All Other Skilled Craft Workers	5	5	0	0	0
All Other Laborers & Unskilled Workers	16	17	1	2	3
TOTAL CLERICAL WORKERS	177	181	4	25	29
Office Machine Operators	1	1	0	0	0
Accounting Clerks	8	8	0	1	1
Bookkeepers, Hand	1	1	0	0	0
Cashiers	7	7	0	1	1
Claims Clerks	7	7	0	1	1
General Office Clerks	9	9	0	2	2
Payroll &/or Timekeeping Clerks	1	1	0	0	0
Procurement Clerks	1	1	0	0	0
Real Estate Clerks	2	2	0	0	0
Secretaries	8	8	0	2	2
Typists	15	16	1	4	5
Postal Service Clerks	34	34	0	4	4
All Other Office Clerical Workers	13	14	1	3	4
Postal Mail Carriers	65	67	2	6	8
All Other Plant Clerical Workers	5	5	0	1	1
TOTAL ALL OCCUPATIONS	541	555	14	68	82

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

SANTA CRUZ COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	187	190	3	25	28
Public Administration Inspectors	171	174	3	23	26
Postmasters &/or Mail Superintendents	5	5	0	1	1
Managers & Officers	11	11	0	1	1
TOTAL PROFESSIONAL WORKERS	31	32	1	2	3
Biological Scientists	16	17	1	2	3
Foresters & Conservation Scientists	5	5	0	0	0
Economists	1	1	0	0	0
Teachers, Nonvocational Education	1	1	0	0	0
Nurses, Professional	1	1	0	0	0
Paralegal Personnel	2	2	0	0	0
Veterinarians	1	1	0	0	0
Physicians &/or Surgeons	1	1	0		
All Other Professional Workers	3	3	0	0	0
TOTAL TECHNICAL WORKERS	21	22	1	2	3
Biological Science Technicians	19	20	1	2	3
All Other Technicians	2	2	0	0	0
TOTAL SERVICE WORKERS	23	24	1	2	3
Janitors, Porters & Cleaners	5	5	0	1	1
Fish & Game Wardens	1	1	0	0	0
Detectives, Police	17	18	1	1	2
TOTAL MAINTENANCE & PRODUCTION WORKERS	16	16	0	1	1
Mechanics, Automotive	1	1	0	0	0
Refrigeration &/or Air Conditioning Mechanics	1	1	0	0	0
Electronic Mechanics	1	1	0	0	0
Electricians	2	2	0	0	0
Heavy Equipment Operators	1	1	0	0	0
Maintenance Repairers, General Utility	2	2	0	0	0
Plumbers &/or Pipefitters	1	1	0	0	0
Stationary Boiler Firers	1	1	0	0	0
All Other Laborers & Unskilled Workers	6	6	0	1	1
TOTAL CLERICAL WORKERS	83	86	3	15	18
Stenographers	4	4	0	1	1
Cashiers	3	3	0	1	1
Claims Clerks	3	3	0	1	1
General Office Clerks	11	11	0	2	2
Payroll &/or Timekeeping Clerks	1	1	0	0	0
Receptionists	1	1	0	0	0
Secretaries	7	7	0	2	2
Typists	8	8	0	2	2
Postal Service Clerks	11	12	1	1	2
All Other Office Clerical Workers	14	15	1	3	4
Postal Mail Carriers	20	21	1	2	3
TOTAL ALL OCCUPATIONS	361	370	9	47	56

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

YAVAPAI COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	46	47	1	8	9
Postmasters &/or Mail Superintendents	18	19	1	4	5
Managers & Officers	28	28	0	4	4
TOTAL PROFESSIONAL WORKERS	200	203	3	30	33
Agricultural Engineers	1	1	0	0	0
Civil Engineers	4	4	0	0	0
All Other Engineers	2	2	0	0	0
Geologists & Geophysicists	1	1	0	0	0
Agricultural Scientists	4	4	0	1	1
Biological Scientists	4	4	0	0	0
Foresters & Conservation Scientists	28	28	0	2	2
Psychologists	3	3	0	0	0
Purchasing Agents &/or Buyers	5	5	0	1	1
Accountants & Auditors	1	1	0	0	0
Landscape Architects	1	1	0	0	0
Caseworkers	9	9	0	2	2
Clergy	2	2	0	0	0
Dentists	3	3	0	0	0
Dietitians &/or Nutritionists	3	3	0	1	1
Librarians, Professional	1	1	0	0	0
Nurses, Professional	86	88	2	16	18
Occupational Therapists	2	2	0	0	0
Personnel & Labor Relations Specialists	3	3	0	0	0
Pharmacists	3	3	0	1	1
Physical Therapists	4	4	0	1	1
Physicians &/or Surgeons	18	19	1	3	4
Public Relations Practitioners	1	1	0	0	0
Tax Examiners, Collectors &/or Revenue Agents	2	2	0	0	0
Group Recreation Workers	1	1	0	0	0
Manual Arts, Music &/or Recreation Therapists	4	4	0	1	1
All Other Professional Workers	4	4	0	1	1
TOTAL TECHNICAL WORKERS	162	164	2	20	22
Computer Programmers	1	1	0	0	0
Drafters	1	1	0	0	0
Electrical & Electronic Technicians	5	5	0	0	0
Surveyors	3	3	0	0	0
All Other Engineering Technicians	6	6	0	1	1
Biological Science Technicians	95	97	2	10	12
Air Traffic Controllers	11	11	0	0	0
Dental Assistants	3	3	0	1	1
Technical Assistants, Library	1	1	0	0	0
Pharmacy Helpers	3	3	0	1	1
Medical Record Librarians	4	4	0	1	1
Medical Laboratory Technologists	10	10	0	2	2
Electrocardiograph Technicians	7	7	0	1	1
Radiologic &/or Nuclear Medical Technologists	5	5	0	1	1
All Other Medical & Dental Techs.	4	4	0	2	2
All Other Technicians	3	3	0	0	0
TOTAL SERVICE WORKERS	148	151	3	25	28
Janitors, Porters & Cleaners	24	25	1	4	5
Cooks, Institution or Cafeteria	10	10	0	1	1
All Other Food Service Workers	49	50	1	9	10
Barbers	2	2	0	0	0
Housekeepers	1	1	0	0	0
Nurse's Aides &/or Orderlies	51	52	1	11	12
Police/Detective Supervisors (Lieutenants, Sergeants, etc.)	9	9	0	0	0
Detectives, Police	1	1	0	0	0
U.S. Marshalls	1	1	0	0	0

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

YAVAPAI COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MAINTENANCE AND PRODUCTION WORKERS	60	61	1	3	4
Mechanics, Automotive	1	1	0	0	0
Electromedical Equipment Repairers	3	3	0	0	0
Refrigeration &/or Air Conditioning Mechanics	1	1	0	0	0
Dry Cleaning Machine Operators	1	1	0	0	0
Truck Drivers	8	8	0	1	1
Carpenters	1	1	0	0	0
Electricians	4	4	0	0	0
Heavy Equipment Operators	2	2	0	0	0
Industrial Truck Operators	1	1	0	0	0
Maintenance Repairers, General Utility	5	5	0	0	0
Painters, Maintenance	3	3	0	0	0
Plumbers &/or Pipefitters	3	3	0	0	0
Dental-Laboratory Technicians	1	1	0	0	0
Sewing Machine Operators, Regular Equipment	1	1	0	0	0
Stationary Boiler Firers	9	9	0	1	1
Stationary Engineers	1	1	0	0	0
Stone Masons	1	1	0	0	0
All Other Operatives & Semiskilled Workers	2	2	0	0	0
All Other Laborers & Unskilled Workers	12	13	1	1	2
TOTAL CLERICAL WORKERS	218	224	6	36	42
Keypunch Operators	1	1	0	0	0
Stenographers	1	1	0	0	0
Accounting Clerks	7	7	0	1	1
Bookkeepers, Hand	2	2	0	0	0
Cashiers	1	1	0	0	0
Claims Clerks	4	4	0	1	1
General Office Clerks	21	22	1	4	5
Mail Clerks	6	6	0	1	1
Payroll &/or Timekeeping Clerks	5	5	0	1	1
Personnel Clerks	5	5	0	1	1
Receptionists	1	1	0	0	0
Secretaries	22	23	1	5	6
Switchboard Operators	2	2	0	1	1
Typists	21	22	1	5	6
Clerical Supervisors, Office or Plant	1	1	0	0	0
Postal Service Clerks	21	22	1	3	4
All Other Office Clerical Workers	33	33	0	7	7
Postal Mail Carriers	60	62	2	5	7
All Other Plant Clerical Workers	4	4	0	1	1
TOTAL SALES WORKERS	3	3	0	0	0
Sales Clerks	3	3	0	0	0
TOTAL ALL OCCUPATIONS	837	853	16	122	138

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

YUMA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	343	351	8	49	57
Public Administration Inspectors	193	197	4	26	30
Construction Inspectors	35	36	1	6	7
Postmasters &/or Mail Superintendents	13	14	1	3	4
Managers & Officers	102	104	2	14	16
TOTAL PROFESSIONAL WORKERS	279	289	10	31	41
Aeronautical Engineers	1	1	0	0	0
Agricultural Engineers	1	1	0	0	0
Chemical Engineers	1	1	0	0	0
Civil Engineers	23	24	1	3	4
Electrical & Electronic Engineers	14	15	1	1	2
Mechanical Engineers	28	28	0	2	2
All Other Engineers	31	31	0	2	2
Mathematicians	13	14	1	3	4
Chemists	1	1	0	0	0
Geologists & Geophysicists	5	5	0	0	0
Meteorologists	2	2	0	0	0
Agricultural Scientists	4	4	0	1	1
Biological Scientists	11	12	1	1	2
Foresters & Conservation Scientists	11	12	1	1	2
All Other Social Scientists	2	2	0	0	0
Systems Analysts, EDP	8	8	0	0	0
Teachers, Nonvocational Education	4	4	0	0	0
Photographers	14	15	1	1	2
Purchasing Agents &/or Buyers	20	21	1	3	4
Accountants & Auditors	8	8	0	1	1
Architects	1	1	0	0	0
Caseworkers	3	3	0	1	1
Writers &/or Editors	1	1	0	0	0
Law Clerks	1	1	0	0	0
Librarians, Professional	1	1	0	0	0
Nurses, Professional	11	12	1	2	3
Personnel & Labor Relations Specialists	14	15	1	2	3
Tax Examiners, Collectors &/or Revenue Agents	4	4	0	1	1
Group Recreation Workers	1	1	0	0	0
All Other Professional Workers	40	41	1	6	7
TOTAL TECHNICAL WORKERS	304	310	6	22	28
Computer Programmers	7	7	0	0	0
Drafters	3	3	0	0	0
Electrical & Electronic Technicians	57	58	1	3	4
Surveyors	15	16	1	1	2
Radiographers	2	2	0	0	0
Broadcast Technicians	6	6	0	0	0
All Other Engineering Technicians	86	88	2	9	11
Physical Science Technicians	8	8	0	1	1
Biological Science Technicians	39	40	1	4	5
Air Traffic Controllers	9	9	0	0	0
Dental Assistants	1	1	0	0	0
Mathematical Technicians	26	26	0	0	0
Physician's Assistants	1	1	0	0	0
Airplane Pilots	2	2	0	0	0
Technical Assistants, Library	2	2	0	0	0
Pharmacy Helpers	1	1	0	0	0
Medical Record Librarians	2	2	0	0	0
Medical Laboratory Technologists	2	2	0	0	0
All Other Technicians	35	36	1	4	5
TOTAL SERVICE WORKERS	353	362	9	24	33
Janitors, Porters & Cleaners	15	16	1	3	4
Guards & Doorkeepers	20	21	1	1	2
Butchers &/or Meat Cutters	8	8	0	1	1

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

YUMA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Cooks, Institution or Cafeteria	3	3	0	0	0
Housekeepers	1	1	0	0	0
Nurse's Aides &/or Orderlies	8	8	0	2	2
Fish & Game Wardens	1	1	0	0	0
Social Service Aides	3	3	0	1	1
Detectives, Police	249	255	6	14	20
U.S. Marshalls	1	1	0	0	0
Fire Fighters	42	43	1	2	3
All Other Service Workers	2	2	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	582	595	13	52	65
Mechanics, Aircraft	1	1	0	0	0
Mechanics, Automotive	24	25	1	2	3
Body Repairers, Automotive	3	3	0	0	0
Electrical Instrument Repairers	1	1	0	0	0
Engineering Equipment Mechanics	31	31	0	2	2
Hydroelectric Mechanics, Powerhouse/Gas Plant	3	3	0	0	0
Locksmiths	3	3	0	0	0
Mechanics, Maintenance	25	25	0	2	2
Refrigeration &/or Air Conditioning Mechanics	21	22	1	2	3
Treatment Plant Mechanics	4	4	0	0	0
Electronic Mechanics	39	40	1	2	3
All Other Mechanics & Repairers	14	15	1	1	2
Truck Drivers	27	27	0	2	2
Air Hammer Operators	1	1	0	0	0
Cable Splicers	7	7	0	0	0
Carpenters	17	18	1	2	3
Crane, Derrick & Hoist Operators	6	6	0	1	1
Craters	2	2	0	0	0
Drillers, Machine	1	1	0	0	0
Electricians	18	19	1	2	3
Exterminators	3	3	0	0	0
Supervisors, Nonworking	4	4	0	0	0
Heavy Equipment Operators	31	31	0	3	3
Industrial Truck Operators	22	23	1	2	3
Inspectors	5	5	0	1	1
Installers, Repairers &/or Section Maintainers	10	10	0	1	1
Instrument Repairers	11	12	1	1	2
Line Installers/Repairers	11	11	0	1	1
Maintenance Repairers, General Utility	29	29	0	3	3
Painters, Maintenance	3	3	0	0	0
Plumbers &/or Pipefitters	9	9	0	1	1
Rotary Drill Operators	5	5	0	1	1
Sheet Metal Workers	1	1	0	0	0
Stationary Boiler Firers	1	1	0	0	0
Stationary Engineers	4	4	0	0	0
Water Treatment Plant Operators	2	2	0	0	0
Pump Station Operators, Waterworks	1	1	0	0	0
Welders &/or Flamecutters	5	5	0	1	1
Offset Lithographic Press Operators	2	2	0	0	0
Camera Operators, Printing	1	1	0	0	0
Stock Clerks, Sales Floor	11	12	1	1	2
Highway Maintenance Workers	1	1	0	0	0
Chemical Operators	2	2	0	0	0
Machine Tool Operators, Combination	7	7	0	1	1
Testers	31	31	0	3	3
Loading Machine Operators	20	21	1	3	4
Gardeners & Groundskeepers	1	1	0	0	0
All Other Skilled Craft Workers	2	2	0	0	0
All Other Operatives & Semiskilled Workers	18	19	1	2	3
All Other Laborers & Unskilled Workers	81	83	2	9	11
TOTAL CLERICAL WORKERS	580	589	9	108	117

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FEDERAL GOVERNMENT

YUMA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Computer Operators	3	3	0	0	0
Keypunch Operators	3	3	0	1	1
All Other Office Machine Operators	1	1	0	0	0
Stenographers	10	10	0	2	2
Accounting Clerks	46	47	1	9	10
Bookkeepers, Hand	5	5	0	1	1
Cashiers	3	3	0	1	1
Claims Clerks	5	5	0	1	1
General Office Clerks	52	53	1	11	12
Mail Clerks	5	5	0	1	1
Payroll &/or Timekeeping Clerks	8	8	0	1	1
Personnel Clerks	8	8	0	2	2
Procurement Clerks	7	7	0	1	1
Real Estate Clerks	10	10	0	2	2
Receptionists	1	1	0	0	0
Secretaries	43	44	1	10	11
Switchboard Operators	6	6	0	2	2
Travel Clerks	2	2	0	0	0
Typists	123	125	2	31	33
Clerical Supervisors, Office or Plant	1	1	0	0	0
Postal Service Clerks	36	37	1	4	5
All Other Office Clerical Workers	33	33	0	7	7
Production Clerks &/or Coordinators	7	7	0	1	1
Shipping Packers	2	2	0	0	0
Shipping &/or Receiving Clerks	5	5	0	0	0
Weighers, Recordkeeping	1	1	0	0	0
Stock Clerks, Stockroom, Warehouse or Storage	2	2	0	0	0
Dispatchers, Vehicle, Service or Work	4	4	0	0	0
Postal Mail Carriers	93	95	2	8	10
All Other Plant Clerical Workers	55	56	1	12	13
TOTAL SALES WORKERS	11	11	0	1	1
Sales Clerks	11	11	0	1	1
TOTAL ALL OCCUPATIONS	2,452	2,507	55	287	342

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE & LOCAL GOVERNMENTS

STATEWIDE

	Estimated 1982 Employment	Percent of Total 1982 Employment	Projected 1986 Employment	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	4,290	7.5	4,628	953
Public Administration Inspectors	1,228	2.1	1,327	273
Construction Inspectors	316	.6	343	79
Chief Execs., Administrators & Legislators	659	1.2	692	118
Managers & Officers	2,087	3.6	2,266	483
TOTAL PROFESSIONAL WORKERS	11,264	19.6	12,359	2,817
Civil Engineers	599	1.1	662	143
Electrical & Electronic Engineers	17	.0	19	3
Mechanical Engineers	6	.0	7	1
Safety Engineers	3	.0	3	1
Traffic Engineers	24	.1	27	6
All Other Engineers	50	.1	55	9
Financial Analysts	9	.0	10	2
Statisticians	104	.2	117	26
All Other Mathematical Scientists	4	.0	5	1
Chemists	47	.1	53	12
All Other Physical Scientists	35	.1	39	7
Agricultural Scientists	7	.0	8	2
Biological Scientists	30	.1	34	7
Foresters & Conservation Scientists	27	.0	30	5
Economists	34	.1	39	8
Psychologists	65	.1	71	11
Urban & Regional Planners	328	.6	366	57
All Other Social Scientists	4	.0	4	1
Systems Analysts, EDP	199	.3	223	33
Teachers, Vocational Education	125	.2	133	33
Vocational & Educational Counselors	164	.3	178	38
Photographers	30	.1	32	5
Purchasing Agents &/or Buyers	134	.2	147	31
Accountants & Auditors	763	1.3	846	198
Landscape Architects	33	.1	37	8
Appraisers	13	.0	13	3
Architects	11	.0	12	3
Budget Analysts	80	.1	89	21
Caseworkers	1,519	2.6	1,648	405
Commercial Artists	26	.0	29	8
Dietitians &/or Nutritionists	63	.1	67	17
Writers &/or Editors	37	.1	42	11
Employment Interviewers	671	1.2	732	142
Law Clerks	89	.2	94	16
Lawyers	758	1.3	834	161
Librarians, Professional	315	.5	341	97
Curators, Museum	13	.0	14	2
Nurses, Professional	413	.7	441	109
Occupational Therapists	41	.1	46	11
Paralegal Personnel	40	.1	44	9
Personnel & Labor Relations Specialists	219	.4	244	51
Physical Therapists	14	.0	15	3
Physicians &/or Surgeons	49	.1	52	10
Public Relations Practitioners	64	.1	72	18
Right-of-Way Agents	127	.2	143	32
Veterinarians	9	.0	10	1
Designers	2	.0	2	0
Community Organization Workers	225	.4	243	59
Welfare Investigators	94	.2	100	24
Judges	160	.3	175	60
Magistrates	176	.3	182	56
Tax Examiners, Collectors &/or Revenue Agents	152	.3	169	40
Assessors	241	.4	261	91
All Other Therapists	26	.0	27	6
Appraisers, Real Estate	122	.2	132	36
Group Recreation Workers	767	1.3	846	190
Manual Arts, Music &/or Recreation Therapists	3	.0	3	1

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE & LOCAL GOVERNMENTS

STATEWIDE

	Estimated 1982 Employment	Percent of Total 1982 Employment	Projected 1986 Employment	Total Job Openings 1982-1986
Speech Pathologists &/or Audiologists	12	.0	12	2
Claims Takers, Unemployment Benefits	48	.1	52	11
Audio Visual Specialists	1	.0	1	0
All Other Professional Workers	1,823	3.2	2,027	463
TOTAL TECHNICAL WORKERS	2,759	4.7	3,012	626
Computer Programmers	346	.6	388	60
Drafters	303	.5	330	52
Electrical & Electronic Technicians	148	.3	164	25
Surveyors	56	.1	60	8
Traffic Technicians	34	.1	37	7
Civil Engineering Technicians	766	1.3	830	168
All Other Engineering Technicians	187	.3	203	36
Science Technicians	43	.1	47	8
Licensed Practical Nurses	170	.3	180	48
Physician's Assistants	27	.0	28	7
Museum Technicians &/or Restorers	12	.0	13	3
Radio Operators	88	.2	95	17
Technical Assistants, Library	128	.2	139	41
Medical & Dental Technicians & Technologists	75	.1	84	23
Emergency Medical Technicians	83	.1	91	61
All Other Technicians	293	.5	323	62
TOTAL SERVICE WORKERS	15,449	26.8	16,572	3,088
Janitors, Porters & Cleaners	715	1.2	775	192
Guards & Doorkeepers	199	.3	219	32
Kitchen Helpers	42	.1	45	10
Cooks, Institution or Cafeteria	147	.3	156	32
All Other Food Service Workers	51	.1	55	13
Supervisors, Nonworking-Service	372	.6	406	77
Nurse's Aides &/or Orderlies	247	.4	259	67
Recreation Facility Attendants	210	.4	221	43
Ushers, Lobby Attendants & Ticket Takers	14	.0	16	4
Forest Conservation Workers	102	.2	105	11
Fish & Game Wardens	11	.0	11	1
School-Crossing Guards	1	.0	1	1
Child-Care Workers	1,063	1.8	1,097	322
Lifeguards	141	.2	155	35
Social Service Aides	254	.4	278	70
Police/Detective Supervisors (Lieutenants, Sergeants, etc.)	1,182	2.1	1,275	163
Detectives, Police	277	.5	300	39
Police Patrol Officers	4,232	7.4	4,605	619
Parking Enforcement Officers	6	.0	6	1
Correction Officers &/or Jailers	2,837	4.9	2,964	770
Sheriffs	313	.5	313	27
Bailiffs	119	.2	130	21
Fire Inspectors	91	.2	99	13
Fire Fighters	1,825	3.2	1,983	269
Fire Fighting & Prevention Supervisors	329	.6	351	42
All Other Service Workers	669	1.2	747	214
TOTAL MAINTENANCE & PRODUCTION WORKERS	9,574	16.6	10,267	1,747
Mechanics, Automotive	362	.6	392	61
Diesel Mechanics	34	.1	35	4
Electric Meter Installers	1	.0	1	0
Gas Meter Installers	13	.0	13	1
Engineering Equipment Mechanics	298	.5	318	46
Hydroelectric Mechanics, Powerhouse/Gas Plant	18	.0	20	4
Mechanics, Maintenance	130	.2	137	19
Radio Mechanics	25	.0	28	5
Treatment Plant Mechanics	71	.1	78	14
Water Meter Installers	39	.1	39	3
All Other Mechanics & Repairers	159	.3	176	32

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE & LOCAL GOVERNMENTS

STATEWIDE

	Estimated 1982 Employment	Percent of Total 1982 Employment	Projected 1986 Employment	Total Job Openings 1982-1986
Truck Drivers	332	.6	356	50
Bricklayers	1	.0	1	0
Bus Drivers	38	.1	42	9
Carpenters	191	.3	213	47
Cement Masons	7	.0	7	1
Crane, Derrick & Hoist Operators	1	.0	1	0
Delivery &/or Route Workers	2	.0	2	0
Electricians	171	.3	187	32
Supervisors, Nonworking	535	.9	577	103
Ground Workers, Utilities	25	.0	28	8
Heavy Equipment Operators	1,356	2.4	1,459	225
Industrial Truck Operators	16	.0	17	2
Instrument Repairers	27	.0	30	5
Line Installers/Repairers	16	.0	16	1
Machinists	10	.0	11	2
Maintenance Repairers, General Utility	357	.6	371	49
Helpers, Trades	202	.4	223	44
Painters, Maintenance	42	.1	45	8
Pipelayers	98	.2	102	15
Plumbers &/or Pipefitters	35	.1	37	6
Press Operators	114	.2	126	22
Refuse Collectors	393	.7	413	45
Sewage Plant Operators	236	.4	249	28
Stationary Boiler Firers	5	.0	6	1
Stationary Engineers	44	.1	49	10
Substation Operators	1	.0	1	0
Animal Caretakers	143	.2	151	37
Trouble Shooters, Power Line	1	.0	1	0
Water Treatment Plant Operators	209	.4	227	37
Pump Station Operators, Waterworks	52	.1	53	5
Welders &/or Flamecutters	61	.1	67	13
Service Station/Fuel Pump Attendants	147	.3	160	30
Highway Maintenance Workers	1,300	2.2	1,358	212
Surveyor Helpers	280	.5	305	57
Gardeners & Groundskeepers	750	1.3	812	210
Bus Drivers, School	2	.0	2	1
Ambulance Drivers &/or Attendants	38	.1	38	5
All Other Skilled Craft Workers	30	.1	33	6
All Other Operatives & Semiskilled Workers	245	.4	267	51
All Other Laborers & Unskilled Workers	911	1.6	987	181
TOTAL CLERICAL WORKERS	14,140	24.6	15,446	4,312
Bookkeeping &/or Billing Machine Operators	15	.0	16	4
Computer Operators	116	.2	126	23
Keypunch Operators	145	.2	161	48
Peripheral EDP Equipment Operators	515	.9	580	189
All Other Office Machine Operators	95	.2	107	39
Stenographers	209	.4	223	59
Accounting Clerks	938	1.6	1,012	261
Bookkeepers, Hand	125	.2	139	39
Cashiers	223	.4	242	65
File Clerks	321	.6	351	119
General Office Clerks	1,651	2.9	1,792	501
Library Assistants	339	.6	367	110
Payroll &/or Timekeeping Clerks	157	.3	174	46
Personnel Clerks	90	.2	99	34
Procurement Clerks	107	.2	120	26
Receptionists	60	.1	66	22
Secretaries	2,226	3.9	2,448	738
Statistical Clerks	253	.4	282	84
Survey Workers	5	.0	5	1
Switchboard Operators	107	.2	117	39
Switchboard Operators/Receptionists	364	.6	409	142
Typists	2,030	3.5	2,219	720

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE & LOCAL GOVERNMENTS

STATEWIDE

	Estimated 1982 Employment	Percent of Total 1982 Employment	Projected 1986 Employment	Total Job Openings 1982-1986
Clerical Supervisors, Office or Plant	582	1.0	642	132
Eligibility Workers	610	1.1	654	155
Court Clerks	498	.9	528	139
Town Clerks	75	.1	78	12
License Clerks	353	.6	385	109
All Other Office Clerical Workers	629	1.1	703	211
Meter Readers, Utilities	140	.2	150	20
Production Clerks &/or Coordinators	87	.2	95	18
Shipping &/or Receiving Clerks	88	.2	98	18
Weighers, Recordkeeping	14	.0	16	4
Stock Clerks, Stockroom, Warehouse or Storage	249	.4	273	53
Dispatchers, Vehicle, Service or Work	57	.1	62	12
Dispatchers, Police, Fire & Ambulance	650	1.1	688	114
All Other Plant Clerical Workers	17	.0	19	6
TOTAL SALES WORKERS	94	.2	102	20
Sales Agents, Associates &/or Representatives	38	.1	43	10
Sales Clerks	56	.1	59	10
TOTAL ALL OCCUPATIONS	57,570	100.0	62,386	13,563

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE & LOCAL GOVERNMENTS

APACHE COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	71	71	0	9	9
Public Administration Inspectors	42	42	0	6	6
Chief Execs., Administrators & Legislators	27	27	0	3	3
Managers & Officers	2	2	0	0	0
TOTAL PROFESSIONAL WORKERS	29	29	0	4	4
Civil Engineers	2	2	0	0	0
All Other Engineers	1	1	0	0	0
Accountants & Auditors	1	1	0	0	0
Appraisers	1	1	0	0	0
Caseworkers	5	5	0	1	1
Dietitians &/or Nutritionists	2	2	0	0	0
Lawyers	3	3	0	0	0
Librarians, Professional	3	3	0	1	1
Nurses, Professional	3	3	0	1	1
Community Organization Workers	1	1	0	0	0
Judges	1	1	0	0	0
Magistrates	2	2	0	1	1
Appraisers, Real Estate	2	2	0	0	0
Group Recreation Workers	1	1	0	0	0
All Other Professional Workers	1	1	0	0	0
TOTAL TECHNICAL WORKERS	13	13	0	1	1
Computer Programmers	1	1	0	0	0
Drafters	1	1	0	0	0
Civil Engineering Technicians	5	5	0	1	1
All Other Engineering Technicians	2	2	0	0	0
Licensed Practical Nurses	1	1	0	0	0
Technical Assistants, Library	2	2	0	0	0
Medical & Dental Technicians & Technologists	1	1	0	0	0
TOTAL SERVICE WORKERS	98	98	0	10	10
Janitors, Porters & Cleaners	9	9	0	2	2
Kitchen Helpers	1	1	0	0	0
Cooks, Institution or Cafeteria	3	3	0	0	0
Supervisors, Nonworking-Service	3	3	0	0	0
Recreation Facility Attendants	1	1	0	0	0
Forest Conservation Workers	2	2	0	0	0
Social Service Aides	5	5	0	1	1
Police/Detective Supervisors (Lieutenants, Sergeants, etc.)	5	5	0	0	0
Police Patrol Officers	28	28	0	2	2
Correction Officers &/or Jailers	8	8	0	2	2
Sheriffs	23	23	0	2	2
Fire Fighters	10	10	0	1	1
TOTAL MAINTENANCE & PRODUCTION WORKERS	111	110	0	10	10
Mechanics, Automotive.	2	2	0	0	0
Mechanics, Maintenance	1	1	0	0	0
Truck Drivers	2	2	0	0	0
Bus Drivers	1	1	0	0	0
Supervisors, Nonworking	11	11	0	1	1
Heavy Equipment Operators	4	4	0	0	0
Maintenance Repairers, General Utility	3	3	0	0	0
Refuse Collectors	1	1	0	0	0
Sewage Plant Operators	1	1	0	0	0
Animal Caretakers	1	1	0	0	0
Water Treatment Plant Operators	1	1	0	0	0
Highway Maintenance Workers	78	77	0	9	9
Gardeners & Groundskeepers	2	2	0	0	0
All Other Laborers & Unskilled Workers	3	3	0	0	0
TOTAL CLERICAL WORKERS	108	108	0	20	20

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE & LOCAL GOVERNMENTS

APACHE COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Stenographers	1	1	0	0	0
Accounting Clerks	2	2	0	0	0
Bookkeepers, Hand	3	3	0	1	1
Cashiers	4	4	0	1	1
General Office Clerks	14	14	0	3	3
Library Assistants	2	2	0	0	0
Payroll &/or Timekeeping Clerks	2	2	0	0	0
Secretaries	7	7	0	2	2
Switchboard Operators	1	1	0	0	0
Switchboard Operators/Receptionists	1	1	0	0	0
Typists	14	14	0	4	4
Clerical Supervisors, Office or Plant	1	1	0	0	0
Eligibility Workers	32	32	0	6	6
Court Clerks	7	7	0	1	1
Town Clerks	1	1	0	0	0
License Clerks	1	1	0	0	0
All Other Office Clerical Workers	3	3	0	1	1
Meter Readers, Utilities	1	1	0	0	0
Stock Clerks, Stockroom, Warehouse or Storage	1	1	0	0	0
Dispatchers, Police, Fire & Ambulance	10	10	0	1	1
TOTAL ALL OCCUPATIONS	430	429	0	54	54

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

COCHISE COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	174	171	0	23	23
Public Administration Inspectors	52	51	0	7	7
Construction Inspectors	9	9	0	1	1
Chief Execs., Administrators & Legislators	47	46	0	6	6
Managers & Officers	66	65	0	9	9
TOTAL PROFESSIONAL WORKERS	216	216	0	34	34
Civil Engineers	9	9	0	1	1
All Other Engineers	1	1	0	0	0
Economists	1	1	0	0	0
Psychologists	3	3	0	0	0
Urban & Regional Planners	8	8	0	0	0
Systems Analysts, EDP	1	1	0	0	0
Teachers, Vocational Education	3	3	0	1	1
Vocational & Educational Counselors	4	4	0	1	1
Purchasing Agents &/or Buyers	2	2	0	0	0
Accountants & Auditors	2	2	0	0	0
Caseworkers	29	29	0	5	5
Dietitians &/or Nutritionists	8	8	0	2	2
Employment Interviewers	15	15	0	2	2
Law Clerks	6	6	0	1	1
Lawyers	13	13	0	1	1
Librarians, Professional	15	15	0	3	3
Nurses, Professional	13	13	0	2	2
Personnel & Labor Relations Specialists	2	2	0	0	0
Community Organization Workers	6	6	0	1	1
Welfare Investigators	2	2	0	0	0
Judges	4	4	0	1	1
Magistrates	15	15	0	4	4
Tax Examiners, Collectors &/or Revenue Agents	2	2	0	0	0
Assessors	11	11	0	3	3
Appraisers, Real Estate	1	1	0	0	0
Group Recreation Workers	27	27	0	4	4
Speech Pathologists &/or Audiologists	6	6	0	1	1
Claims Takers, Unemployment Benefits	4	4	0	1	1
All Other Professional Workers	3	3	0	0	0
TOTAL TECHNICAL WORKERS	38	38	0	3	3
Computer Programmers	2	2	0	0	0
Drafters	2	2	0	0	0
Surveyors	1	1	0	0	0
Traffic Technicians	3	3	0	0	0
Civil Engineering Technicians	18	18	0	2	2
All Other Engineering Technicians	6	6	0	1	1
Science Technicians	1	1	0	0	0
Licensed Practical Nurses	2	2	0	0	0
Radio Operators	3	3	0	0	0
TOTAL SERVICE WORKERS	331	329	0	30	30
Janitors, Porters & Cleaners	20	20	0	4	4
Cooks, Institution or Cafeteria	1	1	0	0	0
Supervisors, Nonworking-Service	6	6	0	1	1
Nurse's Aides &/or Orderlies	3	3	0	1	1
Recreation Facility Attendants	20	20	0	3	3
Forest Conservation Workers	2	2	0	0	0
Child-Care Workers	10	10	0	3	3
Police/Detective Supervisors (Lieutenants, Sergeants, etc.)	42	42	0	2	2
Detectives, Police	13	13	0	1	1
Police Patrol Officers	108	107	0	6	6
Parking Enforcement Officers	1	1	0	0	0
Correction Officers &/or Jailers	22	22	0	5	5
Sheriffs	5	5	0	0	0

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

COCHISE COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Bailiffs	3	3	0	0	0
Fire Inspectors	2	2	0	0	0
Fire Fighters	63	62	0	4	4
Fire Fighting & Prevention Supervisors	8	8	0	0	0
All Other Service Workers	2	2	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	360	358	0	35	35
Mechanics, Automotive	15	15	0	1	1
Gas Meter Installers	6	6	0	0	0
Engineering Equipment Mechanics	7	7	0	1	1
Water Meter Installers	5	5	0	0	0
All Other Mechanics & Repairers	8	8	0	1	1
Truck Drivers	11	11	0	1	1
Carpenters	1	1	0	0	0
Electricians	1	1	0	0	0
Supervisors, Nonworking	19	19	0	2	2
Heavy Equipment Operators	46	45	0	4	4
Industrial Truck Operators	5	5	0	0	0
Maintenance Repairers, General Utility	27	27	0	2	2
Helpers, Trades	2	2	0	0	0
Pipelayers	7	7	0	1	1
Refuse Collectors	25	25	0	1	1
Sewage Plant Operators	23	23	0	1	1
Animal Caretakers	15	15	0	3	3
Water Treatment Plant Operators	10	10	0	1	1
Welders &/or Flamecutters	1	1	0	0	0
Highway Maintenance Workers	69	68	0	8	8
Surveyor Helpers	4	4	0	0	0
Gardeners & Groundskeepers	20	20	0	4	4
Ambulance Drivers &/or Attendants	20	20	0	3	3
All Other Laborers & Unskilled Workers	13	13	0	1	1
TOTAL CLERICAL WORKERS	348	347	0	64	64
Bookkeeping &/or Billing Machine Operators	2	2	0	0	0
Computer Operators	3	3	0	0	0
Keypunch Operators	3	3	0	1	1
Stenographers	5	5	0	1	1
Accounting Clerks	47	46	0	9	9
Bookkeepers, Hand	6	6	0	1	1
Cashiers	6	6	0	1	1
File Clerks	3	3	0	1	1
General Office Clerks	43	43	0	9	9
Library Assistants	8	8	0	2	2
Payroll &/or Timekeeping Clerks	6	6	0	1	1
Personnel Clerks	2	2	0	1	1
Procurement Clerks	3	3	0	0	0
Secretaries	41	41	0	9	9
Statistical Clerks	2	2	0	0	0
Survey Workers	5	5	0	1	1
Switchboard Operators	1	1	0	0	0
Typists	34	34	0	9	9
Clerical Supervisors, Office or Plant	13	13	0	2	2
Eligibility Workers	20	20	0	3	3
Court Clerks	25	25	0	5	5
Town Clerks	9	9	0	1	1
License Clerks	4	4	0	1	1
All Other Office Clerical Workers	1	1	0	0	0
Meter Readers, Utilities	10	10	0	1	1
Dispatchers, Vehicle, Service or Work	1	1	0	0	0
Dispatchers, Police, Fire & Ambulance	45	45	0	5	5
TOTAL ALL OCCUPATIONS	1,467	1,459	0	189	189

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

COCONINO COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	166	165	0	22	22
Public Administration Inspectors	40	40	0	5	5
Construction Inspectors	5	5	0	1	1
Chief Execs., Administrators & Legislators	40	40	0	5	5
Managers & Officers	81	80	0	11	11
TOTAL PROFESSIONAL WORKERS	213	212	0	30	30
Civil Engineers	10	10	0	1	1
Traffic Engineers	2	2	0	0	0
Urban & Regional Planners	1	1	0	0	0
Vocational & Educational Counselors	5	5	0	1	1
Purchasing Agents &/or Buyers	5	5	0	1	1
Accountants & Auditors	10	10	0	1	1
Appraisers	2	2	0	0	0
Budget Analysts	2	2	0	0	0
Caseworkers	30	30	0	5	5
Dietitians &/or Nutritionists	2	2	0	0	0
Employment Interviewers	26	26	0	3	3
Law Clerks	5	5	0	1	1
Lawyers	11	11	0	1	1
Librarians, Professional	7	7	0	2	2
Nurses, Professional	11	11	0	2	2
Paralegal Personnel	1	1	0	0	0
Personnel & Labor Relations Specialists	4	4	0	0	0
Physicians &/or Surgeons	1	1	0	0	0
Designers	2	2	0	0	0
Community Organization Workers	2	2	0	0	0
Magistrates	6	6	0	2	2
Tax Examiners, Collectors &/or Revenue Agents	1	1	0	0	0
Appraisers, Real Estate	6	6	0	1	1
Group Recreation Workers	12	12	0	2	2
All Other Professional Workers	49	48	0	7	7
TOTAL TECHNICAL WORKERS	142	141	0	26	26
Computer Programmers	4	4	0	0	0
Drafters	6	6	0	0	0
Surveyors	1	1	0	0	0
Traffic Technicians	2	2	0	0	0
Civil Engineering Technicians	50	49	0	6	6
All Other Engineering Technicians	6	6	0	1	1
Licensed Practical Nurses	3	3	0	1	1
Physician's Assistants	1	1	0	0	0
Radio Operators	16	16	0	2	2
Technical Assistants, Library	4	4	0	1	1
Medical & Dental Technicians & Technologists	1	1	0	0	0
Emergency Medical Technicians	20	20	0	12	12
All Other Technicians	28	28	0	3	3
TOTAL SERVICE WORKERS	434	430	0	39	39
Janitors, Porters & Cleaners	10	10	0	2	2
Guards & Doorkeepers	14	14	0	1	1
Cooks, Institution or Cafeteria	6	6	0	1	1
Supervisors, Nonworking-Service	2	2	0	0	0
Nurse's Aides &/or Orderlies	5	5	0	1	1
Recreation Facility Attendants	11	11	0	2	2
Forest Conservation Workers	9	9	0	1	1
Fish & Game Wardens	1	1	0	0	0
Child-Care Workers	4	4	0	1	1
Lifeguards	15	15	0	2	2
Social Service Aides	41	41	0	7	7
Police/Detective Supervisors (Lieutenants, Sergeants, etc.)	48	47	0	3	3
Detectives, Police	8	8	0	0	0

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

COCONINO COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Police Patrol Officers	92	91	0	5	5
Parking Enforcement Officers	1	1	0	0	0
Correction Officers &/or Jailers	12	12	0	3	3
Sheriffs	49	48	0	4	4
Bailiffs	3	3	0	0	0
Fire Inspectors	1	1	0	0	0
Fire Fighters	85	84	0	5	5
Fire Fighting & Prevention Supervisors	17	17	0	1	1
TOTAL MAINTENANCE & PRODUCTION WORKERS	425	423	0	42	42
Mechanics, Automotive	11	11	0	1	1
Diesel Mechanics	3	3	0	0	0
Engineering Equipment Mechanics	19	19	0	2	2
Mechanics, Maintenance	1	1	0	0	0
Treatment Plant Mechanics	5	5	0	0	0
Water Meter Installers	1	1	0	0	0
All Other Mechanics & Repairers	3	3	0	0	0
Truck Drivers	19	19	0	1	1
Carpenters	2	2	0	0	0
Crane, Derrick & Hoist Operators	1	1	0	0	0
Electricians	1	1	0	0	0
Supervisors, Nonworking	26	26	0	3	3
Ground Workers, Utilities	2	2	0	0	0
Heavy Equipment Operators	30	30	0	3	3
Machinists	2	2	0	0	0
Maintenance Repairers, General Utility	31	31	0	3	3
Helpers, Trades	5	5	0	1	1
Painters, Maintenance	1	1	0	0	0
Refuse Collectors	18	18	0	1	1
Sewage Plant Operators	13	13	0	1	1
Stationary Engineers	1	1	0	0	0
Substation Operators	1	1	0	0	0
Animal Caretakers	6	6	0	1	1
Water Treatment Plant Operator	10	10	0	1	1
Welders &/or Flamecutters	1	1	0	0	0
Service Station/Fuel Pump Attendants	3	3	0	0	0
Highway Maintenance Workers	105	104	0	12	12
Surveyor Helpers	10	10	0	1	1
Ambulance Drivers &/or Attendants	6	6	0	1	1
All Other Operatives & Semiskilled Workers	19	19	0	2	2
All Other Laborers & Unskilled Workers	69	68	0	8	8
TOTAL CLERICAL WORKERS	341	340	0	68	68
Computer Operators	4	4	0	0	0
Keypunch Operators	2	2	0	0	0
Peripheral EDP Equipment Operators	2	2	0	0	0
Stenographers	8	8	0	2	2
Accounting Clerks	33	33	0	6	6
Cashiers	4	4	0	1	1
File Clerks	13	13	0	3	3
General Office Clerks	22	22	0	5	5
Library Assistants	18	18	0	4	4
Payroll &/or Timekeeping Clerks	3	3	0	1	1
Personnel Clerks	1	1	0	0	0
Secretaries	36	36	0	8	8
Statistical Clerks	1	1	0	0	0
Switchboard Operators	3	3	0	1	1
Typists	70	69	0	18	18
Clerical Supervisors, Office or Plant	8	8	0	1	1
Eligibility Workers	21	21	0	4	4
Court Clerks	25	25	0	5	5
Town Clerks	5	5	0	1	1
License Clerks	11	11	0	2	2

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

COCONINO COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
All Other Office Clerical Workers	4	4	0	1	1
Meter Readers, Utilities	7	7	0	0	0
Shipping &/or Receiving Clerks	1	1	0	0	0
Stock Clerks, Stockroom, Warehouse or Storage	7	7	0	1	1
Dispatchers, Police, Fire & Ambulance	32	32	0	4	4
TOTAL ALL OCCUPATIONS	1,721	1,711	0	227	227

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

GILA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	51	51	0	7	7
Public Administration Inspectors	7	7	0	1	1
Construction Inspectors	5	5	0	1	1
Chief Execs., Administrators & Legislators	24	24	0	3	3
Managers & Officers	15	15	0	2	2
TOTAL PROFESSIONAL WORKERS	90	90	0	15	15
Civil Engineers	4	4	0	1	1
Biological Scientists	2	2	0	0	0
Foresters & Conservation Scientists	1	1	0	0	0
Vocational & Educational Counselors	1	1	0	0	0
Accountants & Auditors	4	4	0	1	1
Budget Analysts	2	2	0	0	0
Caseworkers	28	28	0	5	5
Employment Interviewers	7	7	0	1	1
Lawyers	9	9	0	1	1
Librarians, Professional	1	1	0	0	0
Nurses, Professional	2	2	0	0	0
Physicians &/or Surgeons	3	3	0	0	0
Community Organization Workers	2	2	0	0	0
Judges	2	2	0	1	1
Magistrates	14	14	0	4	4
Tax Examiners, Collectors &/or Revenue Agents	1	1	0	0	0
Assessors	4	4	0	1	1
Appraisers, Real Estate	1	1	0	0	0
Group Recreation Workers	1	1	0	0	0
All Other Professional Workers	1	1	0	0	0
TOTAL TECHNICAL WORKERS	27	27	0	4	4
Drafters	1	1	0	0	0
Civil Engineering Technicians	14	14	0	2	2
All Other Engineering Technicians	5	5	0	1	1
Science Technicians	2	2	0	0	0
Radio Operators	5	5	0	1	1
TOTAL SERVICE WORKERS	176	175	0	16	16
Janitors, Porters & Cleaners	15	15	0	3	3
Child-Care Workers	13	13	0	3	3
Social Service Aides	3	3	0	1	1
Police/Detective Supervisors (Lieutenants, Sergeants, etc.)	21	21	0	1	1
Detectives, Police	2	2	0	0	0
Police Patrol Officers	55	54	0	3	3
Correction Officers &/or Jailers	5	5	0	1	1
Sheriffs	41	41	0	3	3
Bailiffs	2	2	0	0	0
Fire Inspectors	1	1	0	0	0
Fire Fighters	15	15	0	1	1
Fire Fighting & Prevention Supervisors	3	3	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	255	254	0	25	25
Mechanics, Automotive	13	13	0	1	1
Diesel Mechanics	2	2	0	0	0
Engineering Equipment Mechanics	7	7	0	1	1
Water Meter Installers	7	7	0	0	0
Truck Drivers	9	9	0	1	1
Supervisors, Nonworking	4	4	0	0	0
Heavy Equipment Operators	34	34	0	3	3
Industrial Truck Operators	4	4	0	0	0
Maintenance Repairers, General Utility	9	9	0	1	1
Refuse Collectors	17	17	0	1	1
Sewage Plant Operators	4	4	0	0	0
Animal Caretakers	6	6	0	1	1

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

GILA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Water Treatment Plant Operators	7	7	0	1	1
Pump Station Operators, Waterworks	5	5	0	0	0
Highway Maintenance Workers	106	105	0	12	12
Surveyor Helpers	14	14	0	2	2
Gardeners & Groundskeepers	4	4	0	1	1
All Other Laborers & Unskilled Workers	3	3	0	0	0
TOTAL CLERICAL WORKERS	179	179	0	37	37
Computer Operators	1	1	0	0	0
Stenographers	3	3	0	1	1
Accounting Clerks	10	10	0	2	2
Bookkeepers, Hand	1	1	0	0	0
Cashiers	1	1	0	0	0
File Clerks	12	12	0	3	3
General Office Clerks	12	12	0	3	3
Library Assistants	4	4	0	1	1
Payroll &/or Timekeeping Clerks	3	3	0	1	1
Personnel Clerks	2	2	0	1	1
Receptionists	6	6	0	2	2
Secretaries	26	26	0	6	6
Switchboard Operators	1	1	0	0	0
Switchboard Operators/Receptionists	1	1	0	0	0
Typists	38	38	0	10	10
Clerical Supervisors, Office or Plant	4	4	0	0	0
Eligibility Workers	15	15	0	3	3
Court Clerks	5	5	0	1	1
Town Clerks	2	2	0	0	0
Meter Readers, Utilities	1	1	0	0	0
Stock Clerks, Stockroom, Warehouse or Storage	1	1	0	0	0
Dispatchers, Vehicle, Service or Work	8	8	0	1	1
Dispatchers, Police, Fire & Ambulance	22	22	0	2	2
TOTAL ALL OCCUPATIONS	778	776	0	104	104

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

GRAHAM COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	59	59	0	8	8
Public Administration Inspectors	21	21	0	3	3
Construction Inspectors	3	3	0	0	0
Chief Execs., Administrators & Legislators	15	15	0	2	2
Managers & Officers	20	20	0	3	3
TOTAL PROFESSIONAL WORKERS	104	103	0	18	18
Civil Engineers	4	4	0	1	1
Teachers, Vocational Education	1	1	0	0	0
Vocational & Educational Counselors	1	1	0	0	0
Accountants & Auditors	2	2	0	0	0
Caseworkers	49	48	0	9	9
Dietitians &/or Nutritionists	3	3	0	1	1
Employment Interviewers	10	10	0	1	1
Lawyers	3	3	0	0	0
Librarians, Professional	3	3	0	1	1
Nurses, Professional	3	3	0	1	1
Paralegal Personnel	2	2	0	0	0
Physicians &/or Surgeons	1	1	0	0	0
Community Organization Workers	1	1	0	0	0
Judges	1	1	0	0	0
Magistrates	5	5	0	1	1
Assessors	3	3	0	1	1
Appraisers, Real Estate	1	1	0	0	0
Group Recreation Workers	4	4	0	1	1
All Other Professional Workers	7	7	0	1	1
TOTAL TECHNICAL WORKERS	33	33	0	4	4
Computer Programmers	1	1	0	0	0
Drafters	2	2	0	0	0
Surveyors	3	3	0	0	0
Civil Engineering Technicians	19	19	0	2	2
All Other Engineering Technicians	1	1	0	0	0
Licensed Practical Nurses	7	7	0	2	2
TOTAL SERVICE WORKERS	299	297	0	54	54
All Other Food Service Workers	2	2	0	0	0
Supervisors, Nonworking-Service	10	10	0	1	1
Recreation Facility Attendants	5	5	0	1	1
Forest Conservation Workers	4	4	0	0	0
Child-Care Workers	6	6	0	2	2
Social Service Aides	7	7	0	1	1
Police/Detective Supervisors (Lieutenants, Sergeants, etc.)	8	8	0	0	0
Police Patrol Officers	41	41	0	2	2
Correction Officers &/or Jailers	215	213	0	47	47
Bailiffs	1	1	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	165	165	0	12	12
Mechanics, Automotive	4	4	0	0	0
Electric Meter Installers	1	1	0	0	0
Gas Meter Installers	3	3	0	0	0
Engineering Equipment Mechanics	12	12	0	1	1
Water Meter Installers	3	3	0	0	0
Truck Drivers	4	4	0	0	0
Carpenters	4	4	0	0	0
Electricians	3	3	0	0	0
Supervisors, Nonworking	9	9	0	1	1
Ground Workers, Utilities	2	2	0	0	0
Heavy Equipment Operators	8	8	0	1	1
Line Installers/Repairers	5	5	0	0	0
Maintenance Repairers, General Utility	26	26	0	2	2
Painters, Maintenance	2	2	0	0	0

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

GRAHAM COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Pipelayers	3	3	0	0	0
Plumbers &/or Pipefitters	1	1	0	0	0
Refuse Collectors	8	8	0	0	0
Sewage Plant Operators	3	3	0	0	0
Animal Caretakers	1	1	0	0	0
Trouble Shooters, Power Line	1	1	0	0	0
Pump Station Operators, Waterworks	3	3	0	0	0
Service Station/Fuel Pump Attendants	4	4	0	0	0
Highway Maintenance Workers	43	43	0	5	5
Gardeners & Groundskeepers	11	11	0	2	2
All Other Laborers & Unskilled Workers	1	1	0	0	0
TOTAL CLERICAL WORKERS	94	94	0	16	16
Computer Operators	3	3	0	0	0
Stenographers	1	1	0	0	0
Accounting Clerks	5	5	0	1	1
Bookkeepers, Hand	1	1	0	0	0
Cashiers	3	3	0	1	1
General Office Clerks	23	23	0	5	5
Library Assistants	3	3	0	1	1
Payroll &/or Timekeeping Clerks	7	7	0	1	1
Personnel Clerks	1	1	0	0	0
Secretaries	16	16	0	4	4
Typists	5	5	0	1	1
Clerical Supervisors, Office or Plant	5	5	0	1	1
Eligibility Workers	2	2	0	0	0
Court Clerks	2	2	0	0	0
Town Clerks	3	3	0	0	0
License Clerks	5	5	0	1	1
Meter Readers, Utilities	3	3	0	0	0
Shipping &/or Receiving Clerks	1	1	0	0	0
Stock Clerks, Stockroom, Warehouse or Storage	3	3	0	0	0
Dispatchers, Police, Fire & Ambulance	2	2	0	0	0
TOTAL ALL OCCUPATIONS	754	751	0	112	112

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

GREENLEE COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	26	26	0	3	3
Public Administration Inspectors	1	1	0	0	0
Construction Inspectors	1	1	0	0	0
Chief Execs., Administrators & Legislators	14	14	0	2	2
Managers & Officers	10	10	0	1	1
TOTAL PROFESSIONAL WORKERS	33	33	0	5	5
Civil Engineers	2	2	0	0	0
Purchasing Agents &/or Buyers	1	1	0	0	0
Accountants & Auditors	2	2	0	0	0
Budget Analysts	1	1	0	0	0
Caseworkers	8	8	0	1	1
Dietitians &/or Nutritionists	1	1	0	0	0
Lawyers	2	2	0	0	0
Librarians, Professional	1	1	0	0	0
Nurses, Professional	3	3	0	1	1
Judges	1	1	0	0	0
Magistrates	6	6	0	2	2
Tax Examiners, Collectors &/or Revenue Agents	4	4	0	1	1
Assessors	1	1	0	0	0
TOTAL TECHNICAL WORKERS	7	7	0	1	1
Computer Programmers	1	1	0	0	0
All Other Engineering Technicians	1	1	0	0	0
Licensed Practical Nurses	4	4	0	1	1
Medical & Dental Technicians & Technologists	1	1	0	0	0
TOTAL SERVICE WORKERS	67	67	0	5	5
Janitors, Porters & Cleaners	11	11	0	2	2
Police/Detective Supervisors (Lieutenants, Sergeants, etc.)	5	5	0	0	0
Police Patrol Officers	43	43	0	2	2
Correction Officers &/or Jailers	4	4	0	1	1
Sheriffs	1	1	0	0	0
Fire Fighters	3	3	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	58	58	0	5	5
Mechanics, Automotive	5	5	0	0	0
Truck Drivers	4	4	0	0	0
Supervisors, Nonworking	5	5	0	1	1
Heavy Equipment Operators	15	15	0	1	1
Maintenance Repairers, General Utility	1	1	0	0	0
Refuse Collectors	1	1	0	0	0
Sewage Plant Operators	1	1	0	0	0
Animal Caretaker	4	4	0	1	1
Highway Maintenance Workers	22	22	0	2	2
TOTAL CLERICAL WORKERS	49	49	0	10	10
Keypunch Operators	1	1	0	0	0
Stenographers	1	1	0	0	0
Bookkeepers, Hand	3	3	0	1	1
Cashiers	4	4	0	1	1
File Clerks	1	1	0	0	0
Library Assistants	1	1	0	0	0
Receptionists	1	1	0	0	0
Secretaries	17	17	0	4	4
Statistical Clerks	1	1	0	0	0
Typists	3	3	0	1	1
Clerical Supervisors, Office or Plant	1	1	0	0	0
Eligibility Workers	3	3	0	1	1
Court Clerks	3	3	0	1	1
Town Clerks	2	2	0	0	0
Dispatchers, Police, Fire & Ambulance	7	7	0	1	1
TOTAL ALL OCCUPATIONS	240	240	0	29	29

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE & LOCAL GOVERNMENTS

MARICOPA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	2,306	2,622	316	330	646
Public Administration Inspectors	688	782	94	97	191
Construction Inspectors	166	189	23	27	50
Chief Execs., Administrators & Legislators	242	275	33	31	64
Managers & Officers	1,210	1,376	166	175	341
TOTAL PROFESSIONAL WORKERS	7,377	8,389	1,012	1,079	2,091
Civil Engineers	425	483	58	57	115
Electrical & Electronic Engineers	16	18	2	1	3
Mechanical Engineers	6	7	1	0	1
Safety Engineers	2	2	0	0	0
Traffic Engineers	18	20	2	2	4
All Other Engineers	33	38	5	2	7
Financial Analysts	4	5	1	0	1
Statisticians	85	97	12	11	23
All Other Mathematical Scientists	4	5	1	1	2
Chemists	45	51	6	5	11
All Other Physical Scientists	30	34	4	2	6
Agricultural Scientists	4	5	1	1	2
Biological Scientists	26	30	4	3	7
Foresters & Conservation Scientists	23	26	3	2	5
Economists	33	38	5	4	9
Psychologists	34	39	5	3	8
Urban & Regional Planners	266	302	36	15	51
All Other Social Scientists	1	1	0	0	0
Systems Analysts, EDP	165	188	23	7	30
Teachers, Vocational Education	52	59	7	11	18
Vocational & Educational Counselors	93	106	13	13	26
Photographers	6	7	1	1	2
Purchasing Agents &/or Buyers	92	105	13	12	25
Accountants & Auditors	566	644	78	85	163
Landscape Architects	25	28	3	3	6
Architects	7	8	1	1	2
Budget Analysts	63	72	9	9	18
Caseworkers	841	956	115	152	267
Commercial Artists	20	23	3	4	7
Dietitians &/or Nutritionists	28	32	4	6	10
Writers &/or Editors	33	38	5	6	11
Employment Interviewers	418	475	57	50	107
Law Clerks	38	43	5	4	9
Lawyers	511	581	70	57	127
Librarians, Professional	162	184	22	37	59
Curators, Museum	4	5	1	1	2
Nurses, Professional	176	200	24	34	58
Occupational Therapists	31	35	4	5	9
Paralegal Personnel	30	34	4	3	7
Personnel & Labor Relations Specialists	172	196	24	20	44
Physical Therapists	6	7	1	1	2
Physicians &/or Surgeons	17	19	2	3	5
Public Relations Practitioners	59	67	8	9	17
Right-of-Way Agents	108	123	15	14	29
Veterinarians	5	6	1	0	1
Community Organization Workers	119	135	16	22	38
Welfare Investigators	44	50	6	8	14
Judges	98	111	13	28	41
Magistrates	45	51	6	13	19
Tax Examiners, Collectors &/or Revenue Agents	119	135	16	18	34
Assessors	124	141	17	37	54
All Other Therapists	10	11	1	2	3
Appraisers, Real Estate	71	81	10	15	25
Group Recreation Workers	506	575	69	73	142
Speech Pathologists &/or Audiologists	1	1	0	0	0
Claims Takers, Unemployment Benefits	24	27	3	3	6
Audio Visual Specialists	1	1	0	0	0

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

MARICOPA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
All Other Professional Workers	1,432	1,628	196	203	399
TOTAL TECHNICAL WORKERS	1,699	1,932	233	217	450
Computer Programmers	292	332	40	15	55
Drafters	174	198	24	14	38
Electrical & Electronic Technicians	101	115	14	6	20
Surveyors	25	28	3	2	5
Traffic Technicians	19	22	3	2	5
Civil Engineering Technicians	452	514	62	61	123
All Other Engineering Technicians	112	127	15	12	27
Science Technicians	28	32	4	2	6
Licensed Practical Nurses	50	57	7	11	18
Physician's Assistants	6	7	1	1	2
Museum Technicians &/or Restorers	9	10	1	1	2
Radio Operators	46	52	6	5	11
Technical Assistants, Library	59	67	8	14	22
Medical & Dental Assistants	64	73	9	12	21
Emergency Medical Technicians	58	66	8	37	45
All Other Technicians	204	232	28	22	50
TOTAL SERVICE WORKERS	7,594	8,632	1,038	833	1,871
Janitors, Porters & Cleaners	414	471	57	76	133
Guards & Doorkeepers	142	161	19	8	27
Kitchen Helpers	12	14	2	2	4
Cooks, Institution or Cafeteria	55	63	8	9	17
All Other Food Service Workers	16	18	2	3	5
Supervisors, Nonworking-Service	235	267	32	27	59
Nurse's Aides &/or Orderlies	47	53	6	10	16
Recreation Facility Attendants	81	92	11	12	23
Ushers, Lobby Attendants & Ticket Takers	14	16	2	2	4
Forest Conservation Workers	28	32	4	2	6
Fish & Game Wardens	3	3	0	0	0
School-Crossing Guards	1	1	0	1	1
Child-Care Workers	208	236	28	57	85
Lifeguards	104	118	14	15	29
Social Service Aides	170	193	23	31	54
Police/Detective Supervisors (Lieutenants, Sergeants, etc.)	629	715	86	35	121
Detectives, Police	142	161	19	8	27
Police Patrol Officers	2,519	2,864	345	141	486
Parking Enforcement Officers	3	3	0	0	0
Correction Officers	891	1,013	122	201	323
Sheriffs	20	23	3	2	5
Bailiffs	73	83	10	6	16
Fire Inspectors	52	59	7	3	10
Fire Fighters	1,060	1,205	145	63	208
Fire Fighting & Prevention Supervisors	123	140	17	7	24
All Other Service Workers	552	628	76	112	188
TOTAL MAINTENANCE & PRODUCTION WORKERS	4,666	5,306	640	511	1,151
Mechanics, Automotive	203	231	28	17	45
Diesel Mechanics	10	11	1	1	2
Gas Meter Installers	4	5	1	0	1
Engineering Equipment Mechanics	136	155	19	11	30
Hydroelectric Mechanics, Powerhouse/Gas Plant	18	20	2	2	4
Mechanics, Maintenance	20	23	3	2	5
Radio Mechanics	23	26	3	2	5
Treatment Plant Mechanics	55	63	8	5	13
Water Meter Installers	6	7	1	0	1
All Other Mechanics & Repairers	122	139	17	11	28
Truck Drivers	172	196	24	13	37
Bricklayers	1	1	0	0	0
Bus Drivers	32	36	4	4	8

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

MARICOPA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Carpenters	155	176	21	20	41
Cement Masons	2	2	0	0	0
Delivery &/or Route Workers	1	1	0	0	0
Electricians	99	113	14	10	24
Supervisors, Nonworking	277	315	38	31	69
Ground Workers, Utilities	21	24	3	4	7
Heavy Equipment Operators	691	786	95	60	155
Industrial Truck Operators	7	8	1	1	2
Instrument Repairers	16	18	2	1	3
Machinists	7	8	1	1	2
Maintenance Repairers, General Utility	103	117	14	10	24
Helpers, Trades	133	151	18	15	33
Painters, Maintenance	11	13	2	1	3
Plumbers &/or Pipefitters	12	14	2	1	3
Press Operators	87	99	12	7	19
Refuse Collectors	96	109	13	6	19
Sewage Plant Operators	72	82	10	4	14
Stationary Boiler Firers	5	6	1	1	2
Stationary Engineers	37	42	5	4	9
Animal Caretakers	58	66	8	12	20
Water Treatment Plant Operators	136	155	19	12	31
Pump Station Operators, Waterworks	3	3	0	0	0
Welders &/or Flamecutters	35	40	5	4	9
Service Station/Fuel Pump Attendants	80	91	11	9	20
Highway Maintenance Workers	437	497	60	50	110
Surveyor Helpers	164	186	22	19	41
Gardeners & Groundskeepers	404	459	55	79	134
Bus Drivers, School	2	2	0	0	0
Ambulance Drivers &/or Attendants	2	2	0	0	0
All Other Skilled Craft Workers	21	24	3	2	5
All Other Operatives & Semiskilled Workers	154	175	21	18	39
All Other Laborers & Unskilled Workers	536	609	73	61	134
TOTAL CLERICAL WORKERS	8,919	10,141	1,222	1,929	3,151
Bookkeeping &/or Billing Machine Operators	7	8	1	1	2
Computer Operators	66	75	9	7	16
Keypunch Operators	111	126	15	24	39
Peripheral EDP Equipment Operators	458	521	63	110	173
All Other Office Machine Operators	86	98	12	25	37
Stenographers	96	109	13	20	33
Accounting Clerks	498	566	68	99	167
Bookkeepers, Hand	100	114	14	20	34
Cashiers	116	132	16	24	40
File Clerks	213	242	29	59	88
General Office Clerks	901	1,024	123	197	320
Library Assistants	191	217	26	46	72
Payroll &/or Timekeeping Clerks	124	141	17	23	40
Personnel Clerks	66	75	9	18	27
Procurement Clerks	95	108	13	11	24
Receptionists	44	50	6	12	18
Secretaries	1,514	1,721	207	351	558
Statistical Clerks	193	219	26	42	68
Switchboard Operators	71	81	10	19	29
Switchboard Operators/Receptionists	326	371	45	86	131
Typists	1,348	1,533	185	353	538
Clerical Supervisors, Office or Plant	402	457	55	50	105
Eligibility Workers	286	325	39	52	91
Court Clerks	204	232	28	45	73
Town Clerks	19	22	3	2	5
License Clerks	223	254	31	49	80
All Other Office Clerical Workers	508	578	70	111	181
Meter Readers, Utilities	68	77	9	5	14
Production Clerks &/or Coordinators	41	47	6	5	11

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

MARICOPA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Shipping &/or Receiving Clerks	74	84	10	7	17
Weighers, Recordkeeping	14	16	2	2	4
Stock Clerks, Stockroom, Warehouse or Storage	156	177	21	18	39
Dispatchers, Vehicle, Service or Work	32	36	4	4	8
Dispatchers, Police, Fire & Ambulance	252	287	35	29	64
All Other Plant Clerical Workers	16	18	2	3	5
TOTAL SALES WORKERS	34	39	5	4	9
Sales Agents, Associates &/or Representatives	33	38	5	4	9
Sales Clerks	1	1	0	0	0
TOTAL ALL OCCUPATIONS	32,595	37,061	4,466	4,903	9,369

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

MOHAVE COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	120	119	0	17	17
Public Administration Inspectors	37	37	0	5	5
Construction Inspectors	5	5	0	1	1
Chief Execs., Administrators & Legislators	23	23	0	3	3
Managers & Officers	55	54	0	8	8
TOTAL PROFESSIONAL WORKERS	199	199	0	33	33
Civil Engineers	4	4	0	1	1
Foresters & Conservation Scientists	3	3	0	0	0
Urban & Regional Planners	1	1	0	0	0
Systems Analysts, EDP	2	2	0	0	0
Teachers, Vocational Education	6	6	0	1	1
Vocational & Educational Counselors	1	1	0	0	0
Photographers	1	1	0	0	0
Purchasing Agents &/or Buyers	3	3	0	0	0
Accountants & Auditors	22	22	0	3	3
Landscape Architects	4	4	0	1	1
Caseworkers	26	26	0	5	5
Dietitians &/or Nutritionists	3	3	0	1	1
Employment Interviewers	5	5	0	1	1
Law Clerks	18	18	0	2	2
Lawyers	16	16	0	2	2
Librarians, Professional	3	3	0	1	1
Nurses, Professional	4	4	0	1	1
Paralegal Personnel	5	5	0	1	1
Personnel & Labor Relations Specialists	4	4	0	0	0
Physicians &/or Surgeons	3	3	0	0	0
Right-of-Way Agents	1	1	0	0	0
Community Organization Workers	15	15	0	3	3
Judges	4	4	0	1	1
Magistrates	7	7	0	2	2
Tax Examiners, Collectors &/or Revenue Agents	4	4	0	1	1
Assessors	3	3	0	1	1
Appraisers, Real Estate	4	4	0	1	1
Claims Takers, Unemployment Benefits	4	4	0	1	1
All Other Professional Workers	23	23	0	3	3
TOTAL TECHNICAL WORKERS	51	51	0	4	4
Drafters	6	6	0	0	0
Surveyors	3	3	0	0	0
Civil Engineering Technicians	27	27	0	3	3
All Other Engineering Technicians	8	8	0	1	1
Licensed Practical Nurses	1	1	0	0	0
Physician's Assistants	1	1	0	0	0
Technical Assistants, Library	1	1	0	0	0
All Other Technicians	4	4	0	0	0
TOTAL SERVICE WORKERS	413	410	0	32	32
Janitors, Porters & Cleaners	3	3	0	1	1
Guards & Doorkeepers	12	12	0	1	1
Kitchen Helpers	6	6	0	1	1
Cooks, Institution or Cafeteria	7	7	0	1	1
All Other Food Service Workers	6	6	0	1	1
Supervisors, Nonworking-Service	5	5	0	1	1
Nurse's Aides &/or Orderlies	7	7	0	1	1
Recreation Facility Attendants	10	10	0	1	1
Forest Conservation Workers	29	29	0	2	2
Fish & Game Wardens	4	4	0	0	0
Police/Detective Supervisors (Lieutenants, Sergeants, etc.)	59	58	0	3	3
Detectives, Police	10	10	0	1	1
Police Patrol Officers	134	133	0	7	7
Correction Officers &/or Jailers	21	21	0	5	5

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

MOHAVE COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Sheriffs	7	7	0	1	1
Bailiffs	3	3	0	0	0
Fire Inspectors	8	8	0	0	0
Fire Fighters	60	59	0	3	3
Fire Fighting & Prevention Supervisors	19	19	0	1	1
All Other Service Workers	3	3	0	1	1
TOTAL MAINTENANCE & PRODUCTION WORKERS	274	274	0	30	30
Mechanics, Automotive	16	16	0	1	1
Engineering Equipment Mechanics	8	8	0	1	1
Mechanics, Maintenance	5	5	0	0	0
Treatment Plant Mechanics	6	6	0	1	1
Water Meter Installers	15	15	0	1	1
All Other Mechanics & Repairers	6	6	0	1	1
Truck Drivers	14	14	0	1	1
Bus Drivers	3	3	0	0	0
Carpenters	6	6	0	1	1
Cement Masons	1	1	0	0	0
Electricians	5	5	0	0	0
Supervisors, Nonworking	8	8	0	1	1
Heavy Equipment Operators	42	42	0	4	4
Maintenance Repairers, General Utility	9	9	0	1	1
Pipelayers	9	9	0	1	1
Sewage Plant Operators	9	9	0	1	1
Animal Caretakers	8	8	0	2	2
Water Treatment Plant Operators	5	5	0	0	0
Welders &/or Flamecutters	1	1	0	0	0
Service Station/Fuel Pump Attendants	1	1	0	0	0
Highway Maintenance Workers	41	41	0	5	5
Surveyor Helpers	9	9	0	1	1
Gardeners & Groundskeepers	22	22	0	4	4
All Other Operatives & Semiskilled Workers	14	14	0	2	2
All Other Laborers & Unskilled Workers	11	11	0	1	1
TOTAL CLERICAL WORKERS	360	358	0	69	69
Computer Operators	4	4	0	0	0
All Other Office Machine Operators	3	3	0	1	1
Stenographers	9	9	0	2	2
Accounting Clerks	47	46	0	9	9
Cashiers	2	2	0	0	0
File Clerks	1	1	0	0	0
General Office Clerks	80	79	0	17	17
Library Assistants	8	8	0	2	2
Procurement Clerks	2	2	0	0	0
Secretaries	37	37	0	8	8
Statistical Clerks	4	4	0	1	1
Switchboard Operators	4	4	0	1	1
Switchboard Operators/Receptionists	1	1	0	0	0
Typists	44	44	0	11	11
Clerical Supervisors, Office or Plant	13	13	0	2	2
Eligibility Workers	12	12	0	2	2
Court Clerks	14	14	0	3	3
Town Clerks	3	3	0	0	0
License Clerks	26	26	0	5	5
All Other Office Clerical Workers	6	6	0	1	1
Meter Readers, Utilities	4	4	0	0	0
Stock Clerks, Stockroom, Warehouse or Storage	6	6	0	1	1
Dispatchers, Police, Fire & Ambulance	30	30	0	3	3
TOTAL SALES WORKERS	1	1	0	0	0
Sales Clerks	1	1	0	0	0
TOTAL ALL OCCUPATIONS	1,418	1,412	0	185	185

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

NAVAJO COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	74	74	0	11	11
Public Administration Inspectors	12	12	0	2	2
Construction Inspectors	7	7	0	1	1
Chief Execs., Administrators & Legislators	22	22	0	3	3
Managers & Officers	33	33	0	5	5
TOTAL PROFESSIONAL WORKERS	145	145	0	24	24
Civil Engineers	9	9	0	1	1
Systems Analysts, EDP	1	1	0	0	0
Vocational & Educational Counselors	1	1	0	0	0
Purchasing Agents &/or Buyers	2	2	0	0	0
Accountants & Auditors	6	6	0	1	1
Appraisers	5	5	0	1	1
Caseworkers	22	22	0	4	4
Dietitians &/or Nutritionists	2	2	0	0	0
Employment Interviewers	8	8	0	1	1
Lawyers	8	8	0	1	1
Librarians, Professional	5	5	0	1	1
Nurses, Professional	6	6	0	1	1
Personnel & Labor Relations Specialists	1	1	0	0	0
Community Organization Workers	6	6	0	1	1
Judges	4	4	0	1	1
Magistrates	10	10	0	3	3
Tax Examiners, Collectors &/or Revenue Agents	1	1	0	0	0
Assessors	3	3	0	1	1
Appraisers, Real Estate	10	10	0	2	2
Group Recreation Workers	4	4	0	1	1
All Other Professional Workers	31	31	0	4	4
TOTAL TECHNICAL WORKERS	50	50	0	4	4
Drafters	6	6	0	0	0
Civil Engineering Technicians	26	26	0	3	3
All Other Engineering Technicians	11	11	0	1	1
Science Technicians	2	2	0	0	0
Licensed Practical Nurses	1	1	0	0	0
Technical Assistants, Library	1	1	0	0	0
All Other Technicians	3	3	0	0	0
TOTAL SERVICE WORKERS	203	202	0	17	17
Janitors, Porters & Cleaners	8	8	0	1	1
Cooks, Institution or Cafeteria	2	2	0	0	0
Supervisors, Nonworking-Service	3	3	0	0	0
Recreation Facility Attendants	7	7	0	1	1
Fish & Game Wardens	1	1	0	0	0
Lifeguards	21	21	0	3	3
Social Service Aides	2	2	0	0	0
Police/Detective Supervisors (Lieutenants, Sergeants, etc.)	19	19	0	1	1
Detectives, Police	3	3	0	0	0
Police Patrol Officers	59	58	0	3	3
Correction Officers &/or Jailers	23	23	0	5	5
Sheriffs	31	31	0	2	2
Fire Inspectors	2	2	0	0	0
Fire Fighters	17	17	0	1	1
Fire Fighting & Prevention Supervisors	3	3	0	0	0
All Other Service Workers	2	2	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	290	288	0	29	29
Mechanics, Automotive	4	4	0	0	0
Diesel Mechanics	5	5	0	0	0
Engineering Equipment Mechanics	15	15	0	1	1
Mechanics, Maintenance	1	1	0	0	0
Treatment Plant Mechanics	1	1	0	0	0

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

NAVAJO COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Truck Drivers	4	4	0	0	0
Bus Drivers	1	1	0	0	0
Electricians	1	1	0	0	0
Supervisors, Nonworking	22	22	0	2	2
Heavy Equipment Operators	60	59	0	5	5
Maintenance Repairers, General Utility	7	7	0	1	1
Plumbers &/or Pipefitters	3	3	0	0	0
Refuse Collectors	10	10	0	1	1
Sewage Plant Operators	6	6	0	0	0
Animal Caretakers	4	4	0	1	1
Water Treatment Plant Operators	4	4	0	0	0
Service Station/Fuel Pump Attendants	6	6	0	1	1
Highway Maintenance Workers	94	93	0	10	10
Surveyor Helpers	7	7	0	1	1
Gardeners & Groundskeepers	22	22	0	4	4
All Other Operatives & Semiskilled Workers	5	5	0	1	1
All Other Laborers & Unskilled Workers	8	8	0	1	1
TOTAL CLERICAL WORKERS	221	221	0	44	44
All Office Machine Operators	2	2	0	1	1
Stenographers	5	5	0	1	1
Accounting Clerks	16	16	0	3	3
Cashiers	3	3	0	1	1
File Clerks	5	5	0	1	1
General Office Clerks	10	10	0	2	2
Library Assistants	6	6	0	1	1
Payroll &/or Timekeeping Clerks	2	2	0	0	0
Secretaries	27	27	0	6	6
Statistical Clerks	1	1	0	0	0
Typists	38	38	0	10	10
Eligibility Workers	24	24	0	4	4
Court Clerks	8	8	0	2	2
Town Clerks	6	6	0	1	1
License Clerks	26	26	0	5	5
All Other Office Clerical Workers	15	15	0	3	3
Meter Readers, Utilities	3	3	0	0	0
Stock Clerks, Stockroom, Warehouse or Storage	1	1	0	0	0
Dispatchers, Police, Fire & Ambulance	23	23	0	3	3
TOTAL SALES WORKERS	2	2	0	0	0
Sales Clerks	2	2	0	0	0
TOTAL ALL OCCUPATIONS	985	982	0	129	129

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

PIMA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	685	721	36	97	133
Public Administration Inspectors	174	183	9	24	33
Construction Inspectors	96	101	5	15	20
Chief Execs., Administrators & Legislators	64	67	3	8	11
Managers & Officers	351	370	19	50	69
TOTAL PROFESSIONAL WORKERS	1,958	2,059	101	300	401
Civil Engineers	102	107	5	13	18
Electrical & Electronic Engineers	1	1	0	0	0
Safety Engineers	1	1	0	0	0
Traffic Engineers	4	4	0	1	1
All Other Engineers	11	12	1	1	2
Financial Analysts	4	4	0	0	0
Statisticians	18	19	1	2	3
Chemists	1	1	0	0	0
All Other Physical Scientists	5	5	0	0	0
Agricultural Scientists	3	3	0	0	0
Psychologists	19	20	1	2	3
Urban & Regional Planners	42	44	2	2	4
All Other Social Scientists	3	3	0	0	0
Systems Analysts, EDP	25	26	1	1	2
Teachers, Vocational Education	20	21	1	4	5
Vocational & Educational Counselors	36	38	2	5	7
Photographers	20	21	1	2	3
Purchasing Agents &/or Buyers	19	20	1	2	3
Accountants & Auditors	126	133	7	19	26
Landscape Architects	3	3	0	0	0
Appraisers	1	1	0	0	0
Architects	4	4	0	1	1
Budget Analysts	10	11	1	1	2
Caseworkers	336	354	18	60	78
Commercial Artists	5	5	0	1	1
Dietitians &/or Nutritionists	1	1	0	0	0
Writers &/or Editors	4	4	0	1	1
Employment Interviewers	99	104	5	12	17
Law Clerks	13	14	1	1	2
Lawyers	138	145	7	15	22
Librarians, Professional	83	87	4	18	22
Curators, Museum	3	3	0	0	0
Nurses, Professional	107	113	6	20	26
Occupational Therapists	9	9	0	1	1
Paralegal Personnel	2	2	0	0	0
Personnel & Labor Relations Specialists	32	34	2	4	6
Physical Therapists	8	8	0	1	1
Physicians &/or Surgeons	11	12	1	2	3
Public Relations Practitioners	5	5	0	1	1
Right-of-Way Agents	17	18	1	2	3
Veterinarians	1	1	0	0	0
Community Organization Workers	48	51	3	9	12
Welfare Investigators	15	16	1	3	4
Judges	28	29	1	8	9
Magistrates	19	20	1	5	6
Tax Examiners, Collectors &/or Revenue Agents	11	12	1	2	3
Assessors	70	74	4	20	24
All Other Therapists	3	3	0	0	0
Appraisers, Real Estate	6	6	0	1	1
Group Recreation Workers	195	205	10	28	38
Manual Arts, Music &/or Recreation Therapists	3	3	0	0	0
Speech Pathologists &/or Audiologists	5	5	0	1	1
Claims Takers, Unemployment Benefits	13	14	1	2	3
All Other Professional Workers	190	200	10	26	36
TOTAL TECHNICAL WORKERS	493	517	24	65	89

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

PIMA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Computer Programmers	42	44	2	2	4
Drafters	72	76	4	6	10
Electrical & Electronic Technicians	46	48	2	3	5
Surveyors	19	20	1	1	2
Traffic Technicians	8	8	0	1	1
Civil Engineering Technicians	85	90	5	11	16
All Other Engineering Technicians	18	19	1	2	3
Science Technicians	4	4	0	0	0
Licensed Practical Nurses	65	68	3	14	17
Physician's Assistants	8	8	0	2	2
Museum Technicians &/or Restorers	3	3	0	0	0
Radio Operators	18	19	1	2	3
Technical Assistants, Library	55	58	3	13	16
Medical & Dental Technicians & Technologists	2	2	0	0	0
Emergency Medical Technicians	4	4	0	3	3
All Other Technicians	44	46	2	5	7
TOTAL SERVICE WORKERS	2,667	2,807	140	323	463
Janitors, Porters & Cleaners	106	112	6	19	25
Guards & Doorkeepers	23	24	1	1	2
Kitchen Helpers	23	24	1	4	5
Cooks, Institution or Cafeteria	32	34	2	5	7
All Other Food Service Workers	27	28	1	5	6
Supervisors, Nonworking-Service	57	60	3	6	9
Nurse's Aides &/or Orderlies	124	131	7	27	34
Recreation Facility Attendants	27	28	1	4	5
Forest Conservation Workers	1	1	0	0	0
Fish & Game Wardens	1	1	0	0	0
Child-Care Workers	226	238	12	60	72
Lifeguards	1	1	0	0	0
Social Service Aides	25	26	1	4	5
Police/Detective Supervisors (Lieutenants, Sergeants, etc.)	207	218	11	11	22
Detectives, Police	84	88	4	5	9
Police Patrol Officers	735	774	39	40	79
Correction Officers &/or Jailers	412	434	22	91	113
Sheriffs	7	7	0	1	1
Bailiffs	24	25	1	2	3
Fire Inspectors	18	19	1	1	2
Fire Fighters	331	349	18	19	37
Fire Fighting & Prevention Supervisors	120	126	6	7	13
All Other Service Workers	56	59	3	11	14
TOTAL MAINTENANCE & PRODUCTION WORKERS	1,745	1,837	92	183	275
Mechanics, Automotive	61	64	3	5	8
Diesel Mechanics	1	1	0	0	0
Engineering Equipment Mechanics	57	60	3	5	8
Mechanics, Maintenance	88	93	5	8	13
Radio Mechanics	2	2	0	0	0
All Other Mechanics & Repairers	16	17	1	1	2
Truck Drivers	38	40	2	3	5
Carpenters	18	19	1	2	3
Cement Masons	4	4	0	0	0
Delivery &/or Route Workers	1	1	0	0	0
Electricians	43	45	2	4	6
Supervisors, Nonworking	105	111	6	12	18
Heavy Equipment Operators	250	263	13	21	34
Instrument Repairers	10	11	1	1	2
Maintenance Repairers, General Utility	47	49	2	4	6
Helpers, Trades	52	55	3	6	9
Painters, Maintenance	21	22	1	3	4
Pipelayers	76	80	4	9	13
Plumbers &/or Pipefitters	13	14	1	1	2

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

PIMA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Press Operators	11	12	1	1	2
Refuse Collectors	164	173	9	10	19
Sewage Plant Operators	82	86	4	5	9
Stationary Engineers	5	5	0	1	1
Animal Caretakers	19	20	1	4	5
Pump Station Operators	11	12	1	1	2
Welders &/or Flamecutters	17	18	1	2	3
Service Station/Fuel Pump Attendants	44	46	2	5	7
Highway Maintenance Workers	122	128	6	14	20
Surveyor Helpers	54	57	3	6	9
Gardeners & Groundskeepers	171	180	9	33	42
All Other Skilled Craft Workers	9	9	0	1	1
All Other Operatives & Semiskilled Workers	35	37	2	4	6
All Other Laborers & Unskilled Workers	98	103	5	11	16
TOTAL CLERICAL WORKERS	2,222	2,339	117	444	561
Computer Operators	26	27	1	3	4
Keypunch Operators	26	27	1	6	7
Peripheral EDP Equipment Operators	50	53	3	12	15
Stenographers	40	42	2	8	10
Accounting Clerks	160	168	8	31	39
Bookkeepers, Hand	2	2	0	0	0
Cashiers	62	65	3	13	16
File Clerks	30	32	2	8	10
General Office Clerks	406	428	22	87	109
Library Assistants	57	60	3	13	16
Payroll &/or Timekeeping Clerks	4	4	0	1	1
Personnel Clerks	10	11	1	3	4
Procurement Clerks	7	7	0	1	1
Receptionists	4	4	0	1	1
Secretaries	355	374	19	81	100
Statistical Clerks	45	47	2	10	12
Switchboard Operators	11	12	1	3	4
Switchboard Operators/Receptionists	19	20	1	5	6
Typists	181	191	10	46	56
Clerical Supervisors, Office or Plant	101	106	5	12	17
Eligibility Workers	126	133	7	22	29
Court Clerks	87	92	5	19	24
Town Clerks	10	11	1	1	2
License Clerks	50	53	3	11	14
All Other Office Clerical Workers	82	96	4	18	22
Meter Readers, Utilities	26	27	1	2	3
Production Clerks &/or Coordinators	46	48	2	5	7
Shipping/Receiving Clerks	4	4	0	0	0
Stock Clerks, Stockroom, Warehouse or Storage	60	63	3	7	10
Dispatchers, Vehicle, Service or Work	16	17	1	2	3
Dispatchers, Police, Fire & Ambulance	119	125	6	13	19
TOTAL SALES WORKERS	57	60	3	8	11
Sales Agents, Associates &/or Representatives	5	5	0	1	1
Sales Clerks	52	55	3	7	10
TOTAL ALL OCCUPATIONS	9,827	10,340	513	1,420	1,933

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

PINAL COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	196	194	0	26	26
Public Administration Inspectors	30	30	0	4	4
Construction Inspectors	3	3	0	0	0
Chief Execs., Administrators & Legislators	50	49	0	6	6
Managers & Officers	113	112	0	16	16
TOTAL PROFESSIONAL WORKERS	444	442	0	71	71
Civil Engineers	2	2	0	0	0
All Other Engineers	4	4	0	0	0
Statisticians	1	1	0	0	0
Psychologists	9	9	0	1	1
Urban & Regional Planners	3	3	0	0	0
Systems Analysts, EDP	5	5	0	0	0
Teachers, Vocational Education	43	43	0	8	8
Vocational & Educational Counselors	14	14	0	2	2
Photographers	1	1	0	0	0
Purchasing Agents &/or Buyers	8	8	0	1	1
Accountants & Auditors	13	13	0	2	2
Caseworkers	62	61	0	11	11
Dietitians &/or Nutritionists	6	6	0	1	1
Employment Interviewers	36	36	0	4	4
Law Clerks	2	2	0	0	0
Lawyers	18	18	0	2	2
Librarians, Professional	14	14	0	3	3
Nurses, Professional	41	41	0	8	8
Personnel & Labor Relations Specialists	2	2	0	0	0
Physicians &/or Surgeons	10	10	0	1	1
Community Organization Workers	13	13	0	2	2
Welfare Investigators	14	14	0	2	2
Judges	7	7	0	2	2
Magistrates	22	22	0	6	6
Assessors	2	2	0	1	1
All Therapists	11	11	0	2	2
Appraisers, Real Estate	14	14	0	3	3
Group Recreation Workers	9	9	0	1	1
Claims Takers, Unemployment Benefits	3	3	0	0	0
All Other Professional Workers	55	54	0	8	8
TOTAL TECHNICAL WORKERS	70	70	0	11	11
Computer Programmers	1	1	0	0	0
Drafters	11	11	0	1	1
Electrical & Electronic Technicians	1	1	0	0	0
Surveyors	2	2	0	0	0
Civil Engineering Technicians	12	12	0	2	2
All Other Engineering Technicians	3	3	0	0	0
Licensed Practical Nurses	24	24	0	5	5
Physician's Assistants	3	3	0	1	1
Technical Assistants, Library	2	2	0	0	0
Medical & Dental Technicians & Technologists	6	6	0	1	1
Emergency Medical Technicians	1	1	0	1	1
All Other Technicians	4	4	0	0	0
TOTAL SERVICE WORKERS	2,253	2,228	0	451	451
Janitors, Porters & Cleaners	75	74	0	13	13
Guards & Doorkeepers	6	6	0	0	0
Cooks, Institution or Cafeteria	32	32	0	5	5
Supervisors, Nonworking-Service	47	46	0	5	5
Nurse's Aides &/or Orderlies	1	1	0	0	0
Recreation Facility Attendants	12	12	0	2	2
Forest Conservation Workers	7	7	0	0	0
Child-Care Workers	589	583	0	154	154
Social Service Aides	1	1	0	0	0
Police/Detective Supervisors (Lieutenants, Sergeants, etc.)	67	66	0	4	4

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

PINAL COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Detectives, Police	9	9	0	0	0
Police Patrol Officers	104	103	0	6	6
Correction Officers &/or Jailers	1,148	1,135	0	250	250
Sheriffs	94	93	0	7	7
Bailiffs	4	4	0	0	0
Fire Fighters	46	45	0	3	3
Fire Fighting & Prevention Supervisors	3	3	0	0	0
All Other Service Workers	8	8	0	2	2
TOTAL MAINTENANCE & PRODUCTION WORKERS	450	446	0	45	45
Mechanics, Automotive	8	8	0	1	1
Engineering Equipment Mechanics	12	12	0	1	1
Mechanics, Maintenance	4	4	0	0	0
All Other Mechanics & Repairers	4	4	0	0	0
Truck Drivers	13	13	0	1	1
Bus Drivers	1	1	0	0	0
Carpenters	1	1	0	0	0
Electricians	7	7	0	1	1
Supervisors, Nonworking	11	11	0	1	1
Heavy Equipment Operators	80	79	0	7	7
Line Installers/Repairers	11	11	0	1	1
Maintenance Repairers, General Utility	48	47	0	4	4
Helpers, Trades	5	5	0	1	1
Painters, Maintenance	3	3	0	0	0
Pipelayers	2	2	0	0	0
Plumbers &/or Pipefitters	6	6	0	1	1
Press Operators	16	16	0	1	1
Refuse Collectors	30	30	0	2	2
Sewage Plant Operators	5	5	0	0	0
Animal Caretakers	8	8	0	2	2
Water Treatment Plant Operators	2	2	0	0	0
Welders &/or Flamecutters	2	2	0	0	0
Highway Maintenance Workers	62	61	0	7	7
Gardeners & Groundskeepers	29	29	0	5	5
Ambulance Drivers &/or Attendants	10	10	0	1	1
All Other Operatives & Semiskilled Workers	1	1	0	0	0
All Other Laborers & Unskilled Workers	69	68	0	8	8
TOTAL CLERICAL WORKERS	625	619	0	126	126
Bookkeeping &/or Billing Machine Operators	1	1	0	0	0
Computer Operators	5	5	0	1	1
Peripheral EDP Equipment Operators	3	3	0	1	1
Stenographers	10	10	0	2	2
Accounting Clerks	56	55	0	11	11
Bookkeepers, Hand	3	3	0	1	1
Cashiers	7	7	0	1	1
File Clerks	11	11	0	3	3
General Office Clerks	100	99	0	21	21
Library Assistants	6	6	0	1	1
Personnel Clerks	5	5	0	1	1
Secretaries	82	81	0	18	18
Statistical Clerks	6	6	0	1	1
Switchboard Operators	13	13	0	3	3
Switchboard Operators/Receptionists	10	10	0	3	3
Typists	119	118	0	30	30
Clerical Supervisors, Office or Plant	24	24	0	3	3
Eligibility Workers	32	32	0	6	6
Court Clerks	48	47	0	10	10
Town Clerks	8	8	0	1	1
License Clerks	1	1	0	0	0
All Other Office Clerical Workers	7	7	0	1	1
Meter Readers, Utilities	7	7	0	0	0
Shipping &/or Receiving Clerks	6	6	0	1	1

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

PINAL COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Stock Clerks, Stockroom, Warehouse or Storage	7	7	0	1	1
Dispatchers, Police, Fire & Ambulance	48	47	0	5	5
TOTAL ALL OCCUPATIONS	4,038	3,999	0	730	730

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

SANTA CRUZ COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	37	37	0	4	4
Public Administration Inspectors	15	15	0	2	2
Construction Inspectors	2	2	0	0	0
Chief Execs., Administrators & Legislators	10	10	0	1	1
Managers & Officers	10	10	0	1	1
TOTAL PROFESSIONAL WORKERS	69	69	0	11	11
Civil Engineers	1	1	0	0	0
Vocational & Educational Counselors	1	1	0	0	0
Appraisers	4	4	0	1	1
Budget Analysts	1	1	0	0	0
Caseworkers	16	16	0	3	3
Dietitians &/or Nutritionists	1	1	0	0	0
Employment Interviewers	6	6	0	1	1
Law Clerks	3	3	0	0	0
Lawyers	4	4	0	0	0
Nurses, Professional	3	3	0	1	1
Physicians &/or Surgeons	2	2	0	0	0
Veterinarians	1	1	0	0	0
Community Organization Workers	3	3	0	1	1
Welfare Investigators	14	14	0	2	2
Judges	2	2	0	1	1
Magistrates	3	3	0	1	1
Assessors	1	1	0	0	0
Group Recreation Workers	1	1	0	0	0
All Other Professional Workers	2	2	0	0	0
TOTAL TECHNICAL WORKERS	19	19	0	2	2
Drafters	9	9	0	1	1
Traffic Technicians	1	1	0	0	0
Civil Engineering Technicians	7	7	0	1	1
Licensed Practical Nurses	1	1	0	0	0
Technical Assistants, Library	1	1	0	0	0
TOTAL SERVICE WORKERS	115	115	0	10	10
Janitors, Porters & Cleaners	3	3	0	1	1
Recreation Facility Attendants	5	5	0	1	1
Forest Conservation Workers	2	2	0	0	0
Police/Detective Supervisors (Lieutenants, Sergeants, etc.)	6	6	0	0	0
Police Patrol Officers	43	43	0	2	2
Correction Officers &/or Jailers	11	11	0	2	2
Sheriffs	4	4	0	0	0
Fire Inspectors	3	3	0	0	0
Fire Fighters	20	20	0	1	1
Fire Fighting & Prevention Supervisors	1	1	0	0	0
All Other Service Workers	17	17	0	3	3
TOTAL MAINTENANCE & PRODUCTION WORKERS	124	124	0	11	11
Heavy Equipment Operators	15	15	0	1	1
Maintenance Repairers, General Utility	4	4	0	0	0
Pipelayers	1	1	0	0	0
Refuse Collectors	15	15	0	1	1
Sewage Plant Operators	8	8	0	0	0
Animal Caretakers	3	3	0	1	1
Water Treatment Plant Operators	16	16	0	1	1
Highway Maintenance Workers	14	14	0	2	2
Surveyor Helpers	4	4	0	0	0
Gardeners & Groundskeepers	2	2	0	0	0
All Other Laborers & Unskilled Workers	42	42	0	5	5
TOTAL CLERICAL WORKERS	73	73	0	15	15
Stenographers	2	2	0	0	0

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

SANTA CRUZ COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Accounting Clerks	11	11	0	2	2
Bookkeepers, Hand	1	1	0	0	0
File Clerks	2	2	0	1	1
General Office Clerks	5	5	0	1	1
Library Assistants	3	3	0	1	1
Receptionists	1	1	0	0	0
Secretaries	5	5	0	1	1
Typists	19	19	0	5	5
Clerical Supervisors, Office or Plant	2	2	0	0	0
Eligibility Workers	4	4	0	1	1
Court Clerks	5	5	0	1	1
Town Clerks	1	1	0	0	0
License Clerks	3	3	0	1	1
Dispatchers, Police, Fire & Ambulance	9	9	0	1	1
TOTAL ALL OCCUPATIONS	437	437	0	53	53

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

YAVAPAI COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	114	114	0	15	15
Public Administration Inspectors	22	22	0	3	3
Construction Inspectors	7	7	0	1	1
Chief Execs., Administrators & Legislators	44	44	0	5	5
Managers & Officers	41	41	0	6	6
TOTAL PROFESSIONAL WORKERS	195	195	0	33	33
Civil Engineers	20	20	0	3	3
Biological Scientists	2	2	0	0	0
Urban & Regional Planners	3	3	0	0	0
Vocational & Educational Counselors	4	4	0	1	1
Purchasing Agents &/or Buyers	1	1	0	0	0
Accountants & Auditors	5	5	0	1	1
Budget Analysts	1	1	0	0	0
Caseworkers	28	28	0	5	5
Commercial Artists	1	1	0	0	0
Dietitians &/or Nutritionists	5	5	0	1	1
Employment Interviewers	11	11	0	1	1
Lawyers	13	13	0	1	1
Librarians, Professional	6	6	0	1	1
Curators, Museum	5	5	0	1	1
Nurses, Professional	31	31	0	6	6
Personnel & Labor Relations Specialists	1	1	0	0	0
Community Organization Workers	4	4	0	1	1
Welfare Investigators	1	1	0	0	0
Judges	4	4	0	1	1
Magistrates	11	11	0	3	3
Assessors	19	19	0	5	5
All Therapists	2	2	0	0	0
Appraisers, Real Estate	1	1	0	0	0
Group Recreation Workers	3	3	0	0	0
All Other Professional Workers	13	13	0	2	2
TOTAL TECHNICAL WORKERS	76	76	0	8	8
Drafters	6	6	0	0	0
Surveyors	1	1	0	0	0
Civil Engineering Technicians	41	41	0	5	5
All Other Engineering Technicians	10	10	0	1	1
Science Technicians	5	5	0	0	0
Licensed Practical Nurses	9	9	0	2	2
Technical Assistants, Library	2	2	0	0	0
All Other Technicians	2	2	0	0	0
TOTAL SERVICE WORKERS	436	432	0	45	45
Janitors, Porters & Cleaners	34	34	0	6	6
Guards & Doorkeepers	2	2	0	0	0
Cooks, Institution or Cafeteria	7	7	0	1	1
Supervisors, Nonworking-Service	4	4	0	0	0
Nurse's Aides &/or Orderlies	50	49	0	11	11
Recreation Facility Attendants	6	6	0	1	1
Forest Conservation Workers	12	12	0	1	1
Police/Detective Supervisors (Lieutenants, Sergeants, etc.)	24	24	0	1	1
Detectives, Police	3	3	0	0	0
Police Patrol Officers	162	160	0	9	9
Parking Enforcement Officers	1	1	0	0	0
Correction Officers &/or Jailers	27	27	0	6	6
Sheriffs	1	1	0	0	0
Bailiffs	3	3	0	0	0
Fire Inspectors	1	1	0	0	0
Fire Fighters	58	57	0	3	3
Fire Fighting & Prevention Supervisors	14	14	0	1	1
All Other Service Workers	27	27	0	5	5

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

YAVAPAI COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MAINTENANCE & PRODUCTION WORKERS	308	306	0	33	33
Mechanics, Automotive	9	9	0	1	1
Diesel Mechanics	4	4	0	0	0
Engineering Equipment Mechanics	18	18	0	1	1
Mechanics, Maintenance	1	1	0	0	0
Truck Drivers	11	11	0	1	1
Carpenters	3	3	0	0	0
Electricians	2	2	0	0	0
Supervisors, Nonworking	17	17	0	2	2
Heavy Equipment Operators	54	53	0	5	5
Maintenance Repairers, General Utility	18	18	0	2	2
Helpers, Trades	2	2	0	0	0
Painters, Maintenance	2	2	0	0	0
Refuse Collectors	1	1	0	0	0
Sewage Plant Operators	4	4	0	0	0
Animal Caretakers	9	9	0	2	2
Water Treatment Plant Operators	2	2	0	0	0
Welders &/or Flamecutters	2	2	0	0	0
Service Station/Fuel Pump Attendants	7	7	0	1	1
Highway Maintenance Workers	68	67	0	8	8
Surveyor Helpers	13	13	0	1	1
Gardeners & Groundskeepers	21	21	0	4	4
All Other Operatives & Semiskilled Workers	14	14	0	2	2
All Other Laborers & Unskilled Workers	26	26	0	3	3
TOTAL CLERICAL WORKERS	292	291	0	58	58
Computer Operators	2	2	0	0	0
Keypunch Operators	2	2	0	0	0
Peripheral EDP Equipment Operators	1	1	0	0	0
Stenographers	25	25	0	5	5
Accounting Clerks	34	34	0	7	7
Bookkeepers, Hand	2	2	0	0	0
Cashiers	9	9	0	2	2
File Clerks	1	1	0	0	0
General Office Clerks	4	4	0	1	1
Library Assistants	10	10	0	2	2
Payroll &/or Timekeeping Clerks	4	4	0	1	1
Personnel Clerks	3	3	0	1	1
Receptionists	3	3	0	1	1
Secretaries	29	29	0	6	6
Switchboard Operators/Receptionists	4	4	0	1	1
Typists	71	70	0	18	18
Clerical Supervisors, Office or Plant	2	2	0	0	0
Eligibility Workers	12	12	0	2	2
Court Clerks	38	38	0	8	8
Town Clerks	3	3	0	0	0
License Clerks	1	1	0	0	0
All Other Office Clerical Workers	1	1	0	0	0
Meter Readers, Utilities	3	3	0	0	0
Shipping &/or Receiving Clerks	1	1	0	0	0
Stock Clerks, Stockroom, Warehouse or Storage	4	4	0	0	0
Dispatchers, Police, Fire & Ambulance	23	23	0	3	3
TOTAL ALL OCCUPATIONS	1,421	1,414	0	192	192

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

YUMA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	211	209	0	29	29
Public Administration Inspectors	87	86	0	12	12
Construction Inspectors	7	7	0	1	1
Chief Execs., Administrators & Legislators	37	37	0	5	5
Managers & Officers	80	79	0	11	11
TOTAL PROFESSIONAL WORKERS	192	192	0	29	29
Civil Engineers	5	5	0	1	1
Financial Analysts	1	1	0	0	0
Chemists	1	1	0	0	0
Urban & Regional Planners	4	4	0	0	0
Vocational & Educational Counselors	3	3	0	0	0
Photographers	2	2	0	0	0
Purchasing Agents &/or Buyers	1	1	0	0	0
Accountants & Auditors	4	4	0	1	1
Landscape Architects	1	1	0	0	0
Caseworkers	39	39	0	7	7
Dietitians &/or Nutritionists	1	1	0	0	0
Employment Interviewers	30	30	0	3	3
Law Clerks	4	4	0	0	0
Lawyers	9	9	0	1	1
Librarians, Professional	12	12	0	3	3
Curators, Museum	1	1	0	0	0
Nurses, Professional	10	10	0	2	2
Occupational Therapists	1	1	0	0	0
Personnel & Labor Relations Specialists	1	1	0	0	0
Physicians &/or Surgeons	1	1	0	0	0
Right-of-Way Agents	1	1	0	0	0
Veterinarians	2	2	0	0	0
Community Organization Workers	5	5	0	1	1
Welfare Investigators	4	4	0	1	1
Judges	4	4	0	1	1
Magistrates	11	11	0	3	3
Tax Examiners, Collectors &/or Revenue Agents	9	9	0	1	1
Appraisers, Real Estate	5	5	0	1	1
Group Recreation Workers	4	4	0	1	1
All Other Professional Workers	16	16	0	2	2
TOTAL TECHNICAL WORKERS	41	41	0	4	4
Computer Programmers	2	2	0	0	0
Drafters	7	7	0	1	1
Surveyors	1	1	0	0	0
Traffic Technicians	1	1	0	0	0
Civil Engineering Technicians	10	10	0	1	1
All Other Engineering Technicians	4	4	0	0	0
Science Technicians	1	1	0	0	0
Licensed Practical Nurses	2	2	0	0	0
Physician's Assistants	8	8	0	2	2
Technical Assistants, Library	1	1	0	0	0
All Other Technicians	4	4	0	0	0
TOTAL SERVICE WORKERS	363	361	0	31	31
Janitors, Porters & Cleaners	7	7	0	1	1
Cooks, Institution or Cafeteria	2	2	0	0	0
Nurse's Aides &/or Orderlies	10	10	0	2	2
Recreation Facility Attendants	25	25	0	4	4
Forest Conservation Workers	6	6	0	0	0
Fish & Game Wardens	1	1	0	0	0
Child-Care Workers	7	7	0	2	2
Police/Detective Supervisors (Lieutenants, Sergeants, etc.)	42	42	0	2	2
Detectives, Police	3	3	0	0	0
Police Patrol Officers	109	108	0	6	6

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

YUMA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Correction Officers &/or Jailers	38	38	0	8	8
Sheriffs	30	30	0	2	2
Bailiffs	3	3	0	0	0
Fire Inspectors	3	3	0	0	0
Fire Fighters	57	56	0	3	3
Fire Fighting & Prevention Supervisors	18	18	0	1	1
All Other Service Workers	2	2	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	343	343	0	33	33
Mechanics, Automotive	11	11	0	1	1
Diesel Mechanics	9	9	0	1	1
Engineering Equipment Mechanics	7	7	0	1	1
Mechanics, Maintenance	9	9	0	1	1
Treatment Plant Mechanics	4	4	0	0	0
Water Meter Installers	2	2	0	0	0
Truck Drivers	31	31	0	2	2
Carpenters	1	1	0	0	0
Electricians	9	9	0	1	1
Supervisors, Nonworking	21	21	0	2	2
Heavy Equipment Operators	27	27	0	2	2
Instrument Repairers	1	1	0	0	0
Machinists	1	1	0	0	0
Maintenance Repairers, General Utility	24	24	0	2	2
Helpers, Trades	3	3	0	0	0
Painters, Maintenance	2	2	0	0	0
Refuse Collectors	7	7	0	0	0
Sewage Plant Operators	5	5	0	0	0
Stationary Engineers	1	1	0	0	0
Animal Caretakers	1	1	0	0	0
Water Treatment Plant Operators	16	16	0	1	1
Pump Station Operators, Waterworks	30	30	0	3	3
Welders &/or Flamecutters	2	2	0	0	0
Service Station/Fuel Pump Attendants	2	2	0	0	0
Highway Maintenance Workers	39	39	0	4	4
Surveyor Helpers	1	1	0	0	0
Gardeners & Groundskeepers	42	42	0	8	8
All Other Operatives & Semiskilled Workers	3	3	0	0	0
All Other Laborers & Unskilled Workers	32	32	0	4	4
TOTAL CLERICAL WORKERS	309	308	0	64	64
Bookkeeping &/or Billing Machine Operators	5	5	0	1	1
Computer Operators	2	2	0	0	0
Peripheral EDP Equipment Operators	1	1	0	0	0
All Other Office Machine Operators	4	4	0	1	1
Stenographers	3	3	0	1	1
Accounting Clerks	19	19	0	4	4
Bookkeepers, Hand	3	3	0	1	1
Cashiers	2	2	0	0	0
File Clerks	29	29	0	8	8
General Office Clerks	31	31	0	7	7
Library Assistants	22	22	0	5	5
Payroll &/or Timekeeping Clerks	2	2	0	0	0
Receptionists	1	1	0	0	0
Secretaries	34	34	0	8	8
Switchboard Operators	2	2	0	1	1
Switchboard Operators/Receptionists	2	2	0	1	1
Typists	46	45	0	12	12
Clerical Supervisors, Office or Plant	6	6	0	1	1
Eligibility Workers	21	21	0	4	4
Court Clerks	27	27	0	6	6
Town Clerks	3	3	0	0	0
License Clerks	2	2	0	0	0
All Other Office Clerical Workers	2	2	0	0	0

ESTIMATED EMPLOYMENT AND JOB OPENINGS
STATE AND LOCAL GOVERNMENTS

YUMA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Meter Readers, Utilities	7	7	0	0	0
Shipping &/or Receiving Clerks	1	1	0	0	0
Stock Clerks, Stockroom, Warehouse or Storage	3	3	0	0	0
Dispatchers, Police, Fire & Ambulance	28	28	0	3	3
All Other Plant Clerical Workers	1	1	0	0	0
TOTAL ALL OCCUPATIONS	1,459	1,454	0	190	190

METHODOLOGY

Sample Selection and Response Rates

Using standardized survey forms provided by the Department of Labor, a survey of all state and local government units was conducted. Excluded from the survey were education and hospital facilities. Response rates for state and local units were 100 and 90 percent, respectively. Units responding in local government accounted for 99 percent of the sector's employment.

To develop federal occupational employment data, the Department of Economic Security obtained from the U.S. Civil Service Commission a complete account of Arizona's civilian federal occupational employment in 1980.

Employment Projections

Projecting occupational employment and demand is accomplished in two basic stages. First, government employment estimates are developed for the target years. These forecasts are computed using an econometric model driven by forecast values for variables such as national unemployment, interest rates, and industrial production. Staffing pattern ratios, as determined by the OES survey and other resourses, are then applied to the industry employment projections and represents the second stage of the forecasting methodology.

Employment data represent the annual average for the specified year. "Job Opportunities" indicates the average number of job openings (based on the annual average employment) for the period between corresponding months of the specified years. The projection technique does not possess the degree of accuracy that may be implied by small employment and demand figures.

Job Openings

The difference between 1982 and 1986 employment for each occupation represents expected job openings due to growth. Job openings due to separations are calculated by applying an occupation's separation rate[1] to the occupational employment projections. "Total Job Openings" is the sum of openings due to growth and separations. These data do not include openings resulting from turnover, i.e., openings created when a worker changes jobs.

Limitations of the Data

The projection method does not account for cyclical, seasonal, and such external factors as sudden discontinuations or initiations of major government programs.

Employment forecasts for the nonmetropolitan counties are based on growth rates developed for the "balance of state" (Arizona less Maricopa and Pima counties) rather than for individual counties.

---

[1] "Tomorrow's Manpower Needs," Supplement No. 4, BLS, 1974, pp. 11-16.

LABOR MARKET INFORMATION PUBLICATIONS
OCCUPATIONAL EMPLOYMENT STATISTICS
BOX 6123, SITE CODE 733A
PHOENIX, ARIZONA 85005

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
EMPLOYMENT SECURITY MAIL
LAB 441

FIRST CLASS MAIL

Reproduction of this publication for commercial use is prohibited by Section 39-121 Arizona Revised Statutes. Permission to reprint this publication, or parts of it, for nonprofit use may be granted upon written request, if credit will be given citing this publication and the Arizona Department of Economic Security.

This periodical is issued and printed by the Arizona Department of Economic Security as authorized by the Wagner-Peyser Act and is paid out of federal funds granted by the U.S. Department of Labor.

If you do NOT desire to continue receiving this publication, please check here ☐ and return this cover to address below.

If your address has changed, please indicate change and return this cover to the address below.

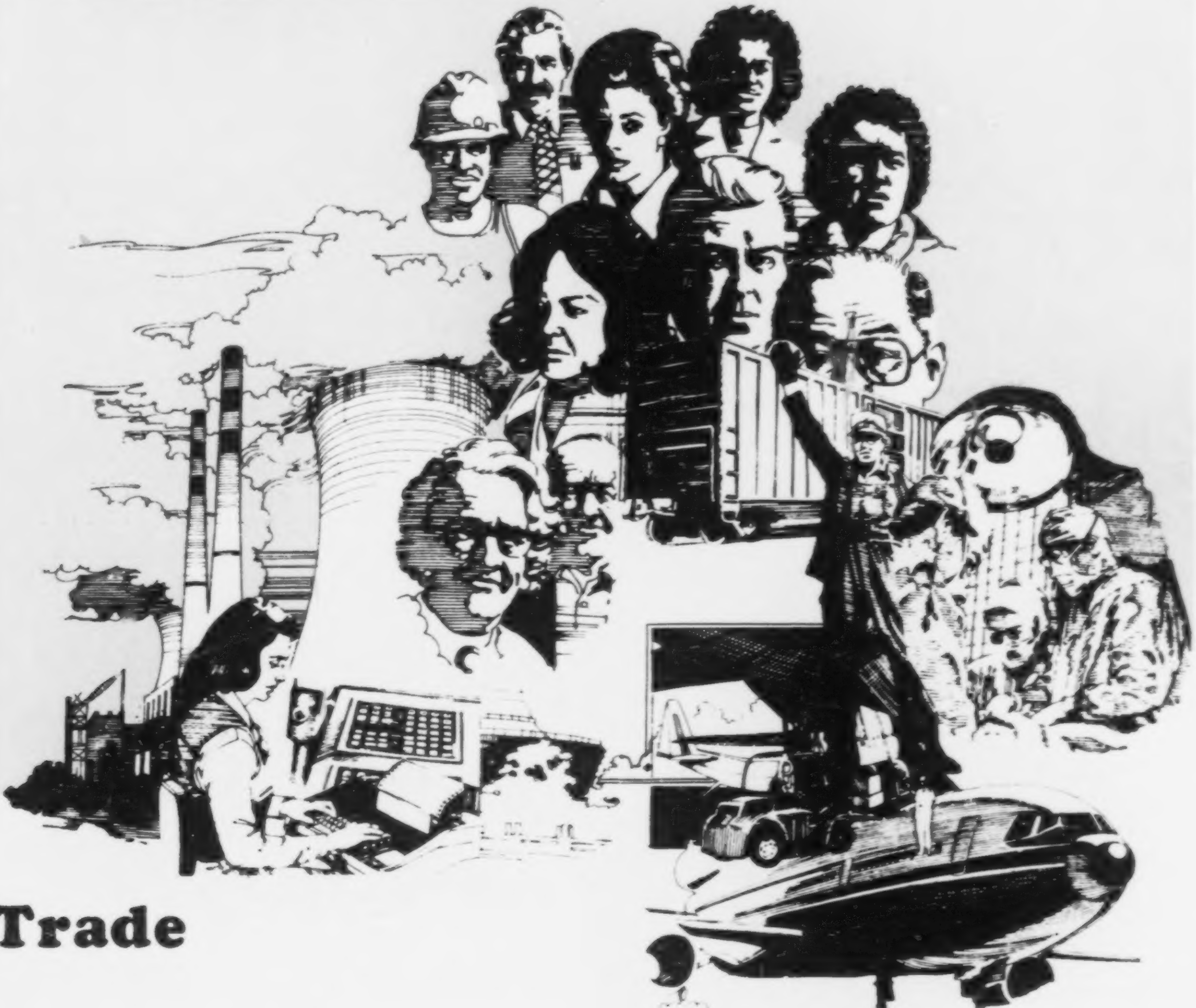
10/17/84 S0465 2.15(u) A

SEPTEMBER 1984

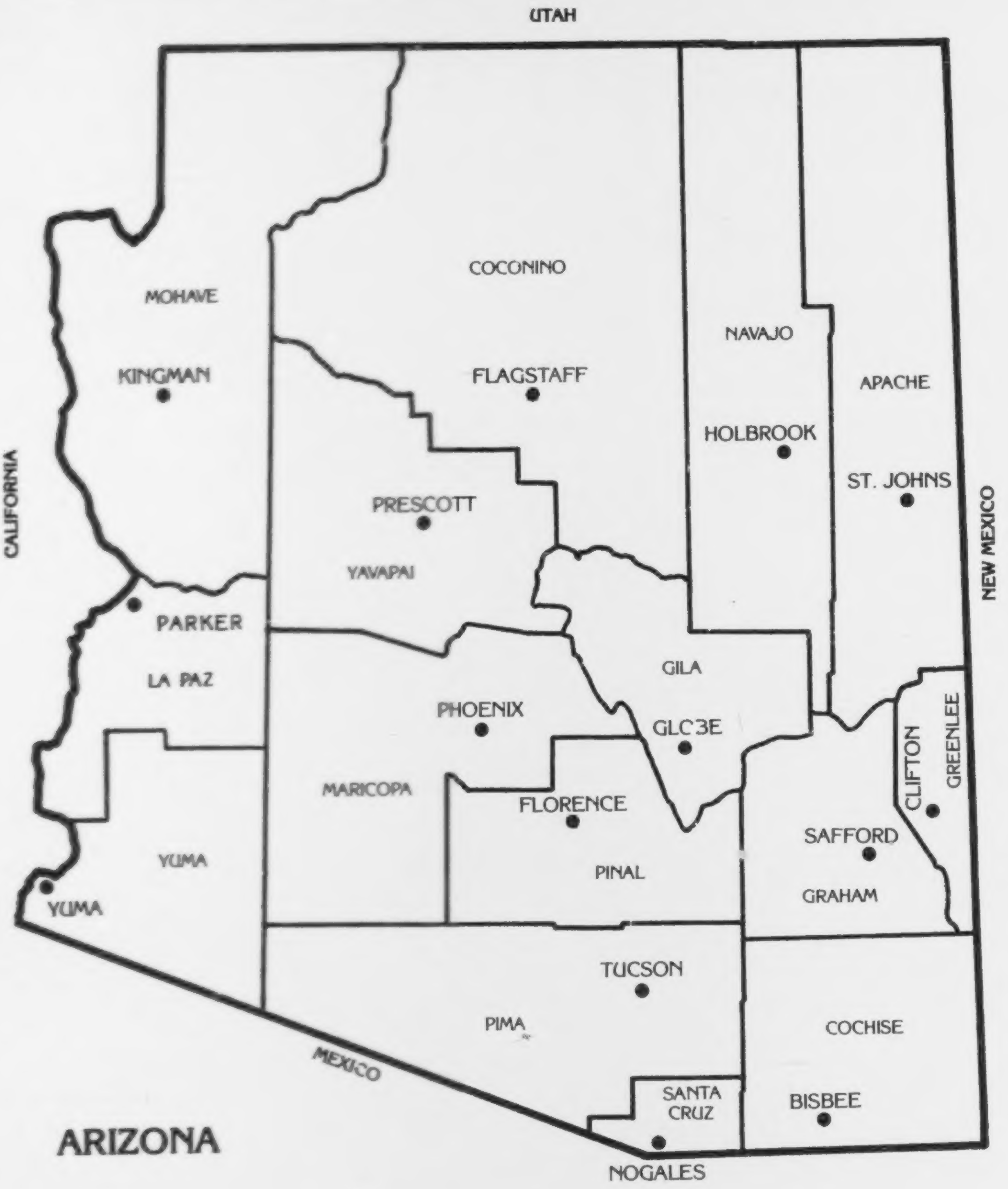
DES-5301 (9-84)

Arizona Occupational Profile

A Labor Market Information Publication
of the Department of Economic Security



Trade


UTAH
CALIFORNIA
NEW MEXICO
MEXICO
MOHAVE
KINGMAN
COCONINO
FLAGSTAFF
NAVAJO
HOLBROOK
APACHE
ST. JOHNS
PRESCOTT
YAVAPAI
PARKER
LA PAZ
GILA
GLOBE
PHOENIX
MARICOPA
FLORENCE
PINAL
CLIFTON
GREENLEE
SAFFORD
GRAHAM
YUMA
YUMA
TUCSON
PIMA
COCHISE
SANTA CRUZ
BISBEE
NOGALES
ARIZONA

OCCUPATIONAL PROFILE

The value of current and accurate occupational employment information has long been recognized by job seekers, public and private administrators, and those involved in training, recruiting, and counseling. A major source of this information in Arizona is the Occupational Employment Statistics (OES) Program - a cooperative effort between Arizona and the U. S. Bureau of Labor Statistics.

This Occupational Profile is one in a series of publications produced from information developed by the Occupational Employment Statistics survey. These publications represent one of several occupational employment information delivery systems incorporating OES survey data. The survey is used to collect employment data, by county, for over 1,000 occupations in Arizona. From these surveys, which require the cooperation of the Arizona business community, current employment in the various occupations is determined, and from this an occupational outlook is formulated. The Occupational Profiles contain the survey findings and examine, individually, the industries of Arizona.

Surveyed industries include:

- Mining
- Construction
- Manufacturing
- Transportation, Communication, and Public Utilities
- Trade
- Finance, Insurance, and Real Estate
- Services
- Government

For further information, or to comment on any aspect of this program, please write to the address on the back cover.

INDUSTRY INFORMATION

INDUSTRY DEFINITION

Occupational estimates for Arizona's wholesale and retail trade industries are provided in this publication for the state and counties.

Wholesale trade includes establishments or places of business primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm or professional business users; or to other wholesalers. Wholesale establishments may also act as agents or brokers in buying merchandise for, or selling merchandise to, such persons or companies as mentioned above.

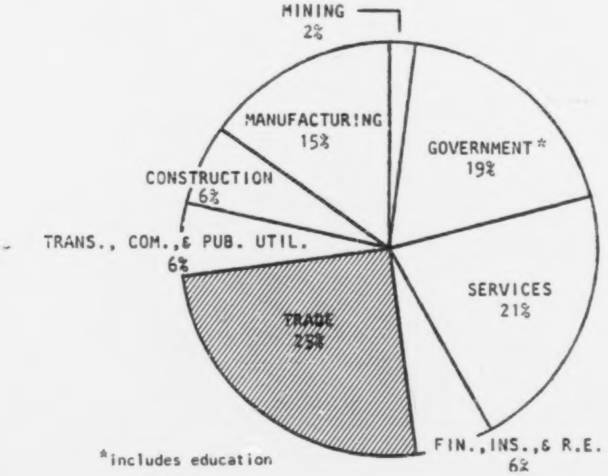
Retail trade, on the other hand, includes establishments which sell merchandise for personal or household consumption and render services incidental to the sale of the goods. Establishments such as lumber yards, and paint, glass and wallpaper stores are included in retail trade if they sell to the general public, even if a higher proportion of their sales is made to contractors. However, establishments that sell exclusively to business establishments, institutional and industrial users, or contractors, are classified in wholesale trade.

A more detailed description of the types of firms categorized in the wholesale and retail trade industries is provided in the Standard Industrial Classification Manual under codes 50 through 59.[1]

INDUSTRY DESCRIPTION

Employing one of every four working Arizonans, the trade industry is the state's largest employer. On the strength of tourism and a burgeoning population, this labor-intensive industry employed 254,000 in 1982. In contrast, at the national level it is manufacturing that employs a quarter of all workers, followed by trade with about eighteen percent.

FIGURE 1: ARIZONA NONAGRICULTURAL EMPLOYMENT, 1982



*includes education

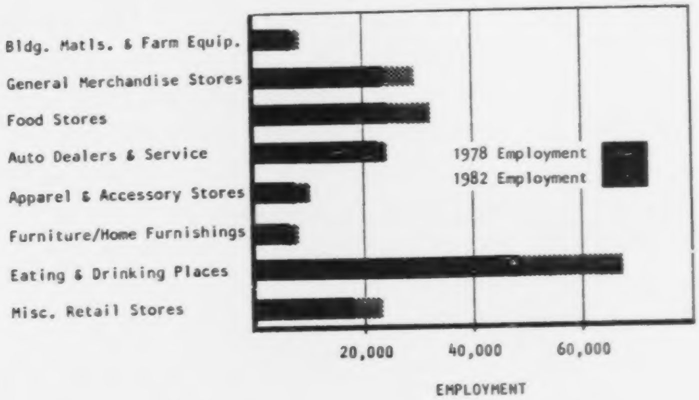
---

[1] Office of Management and Budget, *Standard Industrial Classification Manual*, 1972 Edition, pp. 259 - 276.

RETAIL TRADE

Most employment in Arizona's trade industry (80 percent) is in the retail sector - largely due to employment in eating and drinking places. These establishments, which sell prepared foods and drinks for consumption on the premises, numbered approximately 4,000 and employed nearly 67,000 workers in 1982. With approximately half the number of workers as eating and drinking places are general merchandise stores, food stores and auto dealers and servicers. Of those working in retail food stores, 94 percent are employed in establishments that sell a variety of foods (e.g., supermarkets, grocery stores and delicatessens) rather than specialized foods (e.g., bakeries, fish markets, etc.).

FIGURE 2: ARIZONA'S TRADE EMPLOYMENT, 1978 AND 1982



In motor vehicle - related establishments, employment is concentrated in firms selling both new and used automobiles. These firms numbered about 200 in 1982 and employed nearly 9,000 workers statewide. Another 7,000 were employed in Arizona's 900 gasoline service stations.

As a percentage of the total employment in the "miscellaneous retail" category, drug and proprietary stores dominate (26 percent), followed by jewelry stores (10 percent), gift, novelty and souvenir shops (7 percent) and sporting goods and bicycle shops (7 percent).

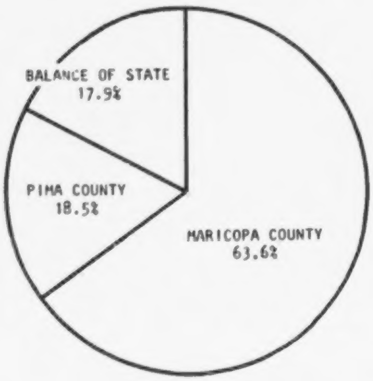
FIGURE 3: WAGE AND SALARY EMPLOYMENT IN MOTOR VEHICLE AND RELATED ESTABLISHMENTS 1982

	FIRMS	EMPLOY.
Motor Vehicle Dlrs. (New & Used)	200	8,940
Motor Vehicle Dealers (Used)	170	630
Gasoline Service Stations	900	7,190
Auto & Home Supply Stores	580	5,950
Motorcycle Dealers	85	510
Automotive Dealers, Other	35	400
Rec. & Utility Trailer Dealers	35	350
Boat Dealers	35	190

Trade employment, like population, is concentrated in the state's two major metropolitan areas. Maricopa County, with 56 percent of the state's population, claims 67 percent of the industry's workers, while Pima County employs 17 percent and the nonmetropolitan counties share the remaining 16 percent.

Restaurants are most concentrated in Mohave and Yavapai counties and least concentrated in Apache County relative to their populations. Based on total employment in the industry, however, Maricopa leads the way with nearly 40,000 restaurant workers and 2,000 tavern workers in 1982, followed by Pima County with 12,000 and 1,100 workers, respectively. Coconino County leads all counties in terms of the number of restaurant workers relative to population.

FIGURE 4: TRADE EMPLOYMENT BY AREA, 1982



The table below provides an index of employment to population. For example, the comparatively large index in Santa Cruz County's general merchandise stores indicates more than four times as many workers, per population, as are employed in Yavapai County's general merchandising industry. Santa Cruz county also has a greater proportion of employment in food stores and apparel and accessory stores. A predominately rural county with an active commercial center (Nogales), Santa Cruz County is an area where trade is especially important to the economy.

FIGURE 5: TRADE EMPLOYMENT PER 1000 POPULATION

INDUSTRY / COUNTY	APACHE	COCHISE	COCONINO	GILA	GRAH/GREEN.	MARICOPA	MOHAVE	NAVAJO	PIMA	PINAL	SANTA CRUZ	YAVAPAI	YUMA
Bldg. Matls. & Farm Equip.	1	2	1	1	3	3	3	2	3	1	3	3	2
General Merch. Stores	5	8	10	5	8	12	5	6	10	4	35	9	8
Food Stores	5	8	7	10	8	13	12	8	9	7	16	13	15
Auto Dealers & Service	2	6	8	6	6	9	12	9	8	6	6	6	9
Apparel & Access.	0	2	2	1	1	4	1	1	3	1	13	2	2
Furniture & Home Furnishings	0	1	1	1	1	4	1	1	2	0	3	2	1
Eating Places	3	12	29	17	12	25	20	14	21	9	18	19	23
Drinking Places	0	1	2	1	1	1	1	1	2	1	0	2	1
Misc. Retail	2	4	7	3	3	10	5	3	8	3	7	6	5

The reader is reminded that employment data in this publication represent those workers earning a wage and salary and exclude self-employed and unpaid family workers. This is especially significant in retail trade which is characterized by many "mom and pop" operations and sole proprietorships.

WHOLESALE TRADE

Statewide, wholesalers of machinery, equipment and supplies lead the industry, in terms of employment, with nearly 14,000 workers in 1982. Firms in this category are primarily engaged in two activities: first, the wholesaling of commercial machines and equipment, such as office, store and business machines; commercial food service equipment and fountain and store fixtures; and second, the marketing of industrial equipment, such as metalworking tools, food production machinery and industrial trucks and tractors. Behind the wholesaling of machinery, equipment and supplies are those wholesaling food and related products, with 9,200 workers in 1982.

FIGURE 6: ARIZONA'S WHOLESALE TRADE INDUSTRY
1982

	FIRMS	EMPLOY.
Machinery, Equip., and Supplies	1,385	13,720
Groceries	625	9,230
Miscellaneous Wholesale Goods	665	4,450
Electrical Goods	500	4,305
Motor Vehicle Parts and Supplies	295	3,440
Hardware, Plumbing, and Heating	325	2,570
Lumber and Construction Matls.	225	2,250
Aloholic Beverages	75	1,820
Furniture and Home Furnishings	195	1,550
Petroleum and Petroleum Products	130	1,470
Paper and Paper Products	155	1,400
Drugs and Sundries	175	1,130
Chemicals	140	1,015
Metals and Minerals, Exc. Petrol.	75	710
Sporting, Recreation, and Hobby	95	540
Apparel and Notions	105	530
Farm Products	35	300
TOTAL	5,210	50,430

Employment in wholesale trade is concentrated in Maricopa County, in part, because of its location at the hub of the state's highway network. The concentration is especially evident in the durable sector where Maricopa County employs 80 percent of those working in wholesale trade establishments versus 76 percent in nondurables.

In the rural counties, however, employees in the wholesaling of nondurable goods outnumber those in the durable sector by about two to one. Yuma and Santa Cruz counties are primarily responsible for this, as the two counties employ nearly 1,400 in the wholesale distribution of fresh fruits and vegetables. With the exception of Mohave County, wholesale trade employment in the remaining nonmetropolitan counties is more equally divided between durable and nondurable. The industry in Mohave County is dominated by the wholesaling of durables - primarily machinery.

FIGURE 7: ARIZONA'S WHOLESALE TRADE INDUSTRY
BY COUNTY, 1982

	ESTAB.	EMPLOY.
Maricopa	3,995	39,870
Pima	600	5,840
Yuma	115	1,650
Santa Cruz	160	830
Pinal	45	490
Coconino	60	480
Cochise	45	360
Mohave	55	270
Yavapai	55	250
Graham/Greenlee	25	150
Navajo	30	110
Gila	20	70
Apache	10	60

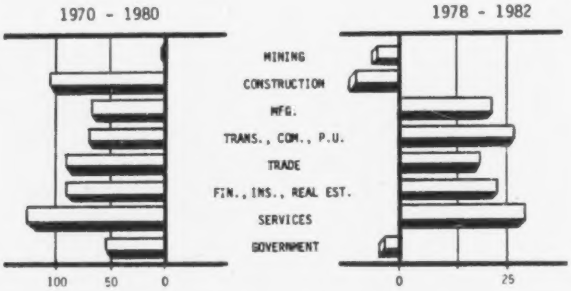
The miscellaneous wholesale goods industry, which is ranked fourth in the above table, is dominated by wholesalers of farm supplies such as animal feeds, agricultural chemicals, pesticides and seeds.

In contrast to measurements of employment, rankings by dollar volume of sales find wholesalers of groceries and related products leading the way, followed by wholesalers of motor vehicles and automotive parts and machinery, equipment and related supplies.

INDUSTRY TRENDS

Over the last decade, trade maintained its position as the industry employing the most workers in Arizona. Continued expansion in population, tourism, industrial development and income have resulted in relatively consistent increases in the number of retail establishments in operation and in the volume of business transacted. In 1982, nearly 25 percent of all Arizona workers were employed in the trade industry, as compared to approximately 23 percent in 1970. Eighty-three thousand jobs have been added in the retail sector and more than 20,000 in wholesale trade in the past ten years. Since 1972, employment in both retail and wholesale trade has grown nearly 70 percent compared to the change for all Arizona industries of about 60 percent.

FIGURE 8: EMPLOYMENT CHANGE IN ARIZONA'S INDUSTRIES (PERCENT)



Responding to a growing population and an increasing inclination by people to eat outside the home, employment in eating and drinking places led the trade industry with more than 18,000 new jobs between 1977 and 1982. For this period, establishments that primarily serve alcoholic beverages increased their employment 27 percent, while those that are primarily eating establishments grew 22 percent. This growth is not merely a local phenomenon. Nationally, over the last seven years, the number of jobs added in eating and drinking places was greater than the total employment in our nation's auto and steel industry.

Although providing a fraction of the number of new jobs created by eating and drinking establishments, retailers of apparel and accessories claim the highest growth rate between 1978 and 1982. Providing more than 2,000 new jobs during the period, these retailers expanded their employment 30 percent and, as of 1982, employed 9,000 workers in Arizona.

Reflecting their sensitivity to economic downturns, retailers of building materials and home furnishings registered a reduced rate of growth as a result of the most recent recession. After experiencing significant growth for most of the decade, sellers of building materials lost more than 7 percent of their employment in 1979, while home furnishings stores lost nearly 4 percent. Employment in general merchandise retailing, on the other hand, was undermined more by the 1975-76 recession.

FIGURE 9: GROWTH IN ARIZONA'S RETAIL TRADE INDUSTRIES

1971 - 1980

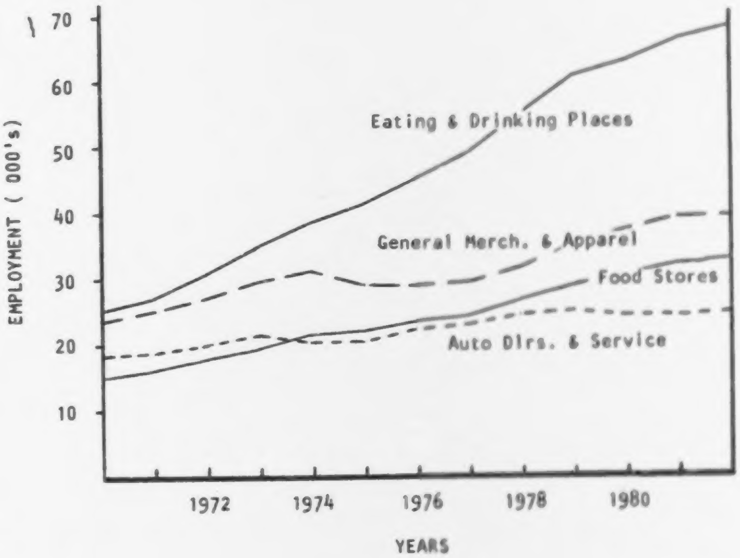
	Growth		
	Percent	Absolute	RANK
Eating & Drinking Places	129%	35,550	1
Food Stores	93	14,975	2
Apparel & Accessories	81	3,859	3
Bldg. Matls. & Farm Equip.	65	3,450	4
Furniture & Home Furnishings	63	3,325	5
General Merchandise	40	8,525	6
Auto Dealers & Service	29	5,425	7

1978 - 1982

	Growth	
	Percent	Absolute
Apparel & Accessories	30%	2,150
Food Stores	23	6,025
Eating & Drinking Places	22	12,200
General Merchandise	14	3,640
Furniture & Home Furnishings	2	175
Bldg. Matls. & Farm Equip.	1	75
Auto Dealers & Service	-1	-325

Experiencing a more long-term lackluster performance, however, is the automobile services industry. Sellers of automobiles in 1982 numbered nearly the same as they did in 1973, while gasoline service station employment has changed little since 1975 - this, even though passenger car registrations increased nearly 50,000 annually for the period.

FIGURE 10: EMPLOYMENT IN SELECTED TRADE INDUSTRIES 1970 - 1982



The wholesale sector experienced, over the last decade, the greatest employment growth in the wholesaling of electrical goods (130%), hardware, plumbing and heating equipment (94%) and dry goods and apparel (73%). From 1977 to 1982, however, wholesalers of hardware, plumbing and heating equipment ranked highest based on the rate of employment growth and were followed by wholesalers of electrical goods and those selling groceries.

Both wholesale and retail trade employment will expand rapidly through 1986. Following meager increases in 1981 and 1982, trade employment is responding to robust economic conditions and is expected to expand nearly 6 percent annually for the balance of the period. This is compared to national increases averaging less than 3 percent annually.

Population increases, although not matching the high rates of the 1970's, will average nearly 3.5 percent annually through 1986 and will provide further impetus to the growth of trade. Over the past two decades, the state's compounded population growth rate averaged nearly 4 percent compared to 1 percent for the United States. Arizona's projected growth rate through the year 2,000 is more than three times the U.S. rate.

Eating and drinking places will lead the industry, expanding nearly 25 percent between 1982 and 1986 to accomodate an expanding population and the growing number of families with two wage earners. As more spouses enter the work force, many families will find dining out a welcome convenience. Further bolstered by an improving economy, tourism and more convention business, eating and drinking establishments will employ 17,000 more workers by 1986. Ten thousand of these openings will be in Maricopa County, 3,000 in Pima County and the balance in the nonmetropolitan counties.

The recent boom in housing construction will be followed by development of neighborhood shopping centers and will contribute to large employment gains in department, grocery, drug and miscellaneous goods stores (e.g. jewelry, books, cameras and sporting goods). Although their employment will increase, a smaller share of total retail trade employment can be expected for mobile home dealers, variety, candy, dairy products, women's accessory and general merchandise stores.

Automotive dealers and gasoline service stations will likely continue the unassuming performance established in recent years. Growing at half the rate of trade overall, this sector will realize about 800 new jobs annually.

Overall, Arizona's trade industry will witness the addition of 45,000 workers to its ranks between 1982 and 1986. Growth in volume of sales will outpace employment increases, however, as self-service - already the rule in most food and variety stores - is extended to other kinds of stores. The rate of employment expansion is predicted to peak in 1984 with moderation in the succeeding two years.

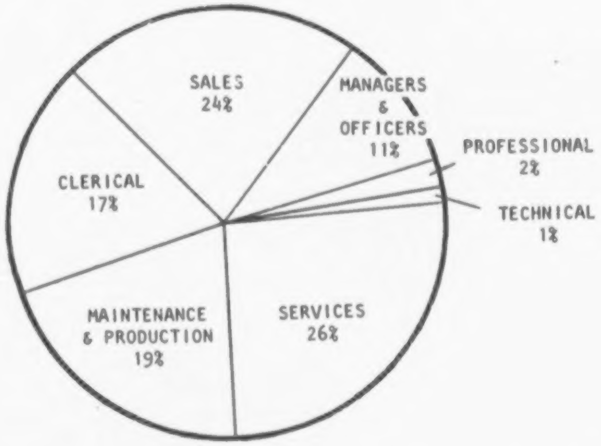
OCCUPATIONAL INFORMATION

OCCUPATIONAL ANALYSIS

The prominence of restaurant employment contributes to the high ranking of service workers in the trade industry. Of the 64,000 service workers in the industry, 16,000 are waiters or waitresses and another 16,000 are food preparation and service workers in fast food restaurants. Kitchen helpers rank a distant third with employment of 6,000.

Numbering nearly as many as service workers are those employed in sales occupations. This occupational group of nearly 60,000 workers is almost exclusively comprised of sales clerks and sales representatives, agents and associates. Sales clerks, unlike sales representatives, sell a variety of goods and services, usually inexpensive and not requiring much more knowledge of them than price. Sales representatives, on the other hand, are primarily involved with selling when extensive knowledge of the goods or services is required. Both the sales clerks and the "sales representatives, agents and associates" numbered 28,000 in 1982. It should be remembered that these data represent only workers earning a wage or salary and exclude those earning a commission only.

FIGURE 11: OCCUPATIONS IN ARIZONA'S TRADE INDUSTRY
MAY 1982



Not far behind sales workers, and ranking third based on employment, is the maintenance and production workers category. Dominant here are delivery and route workers, automobile mechanics and sale -floor stock clerks. Note that retail trade includes automobile dealers and gasoline service stations but not establishments that are primarily involved with maintenance and repair of automobiles. The latter is included in the services industry - the subject of another "Arizona Occupational Profile."

County and statewide distributions of occupational employment are consistent with one another with the following exceptions. In Apache county,

FIGURE 12: MOST FREQUENTLY REPORTED OCCUPATIONS IN ARIZONA'S TRADE INDUSTRY

	Employment 1982	Job Openings* 1982-1986
Sales Clerks	28,517	7,836
Sales Reps., Agents &/or Associates	28,255	8,336
Waiters or Waitresses	16,423	7,604
Food Prep. & Service Workers, Fast Food	15,803	6,710
Cashiers	13,569	4,968
Managers, Store	13,406	4,052
Stock Clerks, Sales Floor	7,014	1,534
Kitchen Helpers	5,837	2,433
General Office Clerks	5,282	2,075
Cooks, Restaurant	5,088	2,010
Delivery & Route Workers	5,053	1,353
Stock Clerks	4,652	1,343
Mechanics, Automotive	4,379	1,000
Mgrs., Restaurant, Coffee Shop or Liquor Est.	4,284	1,708
Dining Rm. & Caf. Attends. & Bartdr. Helpers	3,933	1,191
Baggers	3,610	839
Fuel Pump Attendants &/or Lubricators	3,597	874
Cooks, Short Order &/or Specialty Fast Foods	3,050	1,150
Bookkeepers, Hand	3,008	1,158
Janitors, Porters & Cleaners	2,778	1,005
Bartenders	2,538	980
Accounting Clerks	2,529	946
Truck Drivers	2,400	642
Wholesalers	2,349	829
Secretaries	1,983	840
Counter Attends., Lunch, Coffee Shop & Cafe.	1,979	895
Managers, Merchandise	1,944	562
Hosts/Hostesses, Rest., Lounge & Coffee Shop	1,687	789
Shipping &/or Receiving Clerks	1,653	447
Order Fillers	1,653	445
Buyers	1,522	461
Order Clerks	1,412	575
Supervisors, Nonworking	1,290	394
Sales Clerk Supervisors	1,273	462
Butchers &/or Meat Cutters	1,225	324

* Does not include turnover.

sales workers is the largest category and services workers, which ranks first in the state, ranks third. Trade employment in Santa Cruz county is led by clerical workers and sales workers and, again, service workers ranks third.

As the largest category in the trade industry, service occupations will provide the greatest number of job opportunities in the years ahead. Due to the growth of the industry and separations from the labor force, 26,000 openings are expected in the service occupations between 1982 and 1986. More than half of these will be in two occupations - waiters/waitresses and workers in fast food restaurants. Furthermore, many of those employed in these occupations are part-time workers, and because their turnover rate is particularly high, job openings will be especially plentiful.

Excluding turnover, sales occupations will provide about 4,200 employment opportunities annually. These openings will be equally divided between sales clerks and sales representatives, agents and/or associates, most of whom work in general merchandise stores - primarily, department stores. Although computer technologies are redefining employee tasks, retail trade will continue to be a good source of employment for recent high school graduates and others without extensive work histories.

According to Mr. Charles Nelson, Senior Vice President of Personnel at The Broadway Southwest, "Required experience for most retail positions does not currently include work with computers and peripheral equipment. However, a job seeker with such experience has an advantage and this preferred experience will become a requirement in the not too distant future."

Traditionally, capable sales workers without a college degree often advanced to management positions. However, a college education is now becoming increasingly important for advancement - especially in large retail establishments where college graduates are often hired as management trainees. "Managers and Officers" numbered 28,000 in 1982 and will likely expand to about 32,000 by 1986. Store managers dominate this occupational group that includes, among others, wholesalers, merchandise managers, restaurant managers and automobile service department managers.

Although not providing as many job openings as service occupations, the clerical category will expand the fastest - thus increasing its share of total trade employment. One-third of this category's 15,000 openings through 1986 will be for cashiers. In addition, many more openings will occur as cashiers transfer to other jobs. Although expanding more rapidly than the average for all occupations, employment for cashiers is likely to be affected by the use of computerized checkout systems. Computers, in addition to recording the description, price and tax of an item, also can track inventory and place orders when stock is needed.

Maintenance and production occupations will realize 13,000 openings during the projection period. Predominant are sales floor stock clerks, delivery and route workers and automotive mechanics.

OCCUPATIONAL STRUCTURE

The following tables provide employment estimates and projected employment and job openings for the state. A table for La Paz County is not included as the survey sample was drawn prior to this county's creation.

When using the data, please note the following:

1) The data reflect full and part-time wage and salary employment only, and do not include self-employed or unpaid family workers and those earning only a commission.

2) "Total Job Openings" represents the number of openings due to growth of the industry and separations from the labor force. They do not account for labor turnover, i.e., openings created when a worker changes jobs, leaving the job to be filled by someone else. These vacancies are often the largest source of job openings.

3) The projection technique does not possess the degree of accuracy that may be implied by small employment and demand figures.

4) To eliminate the possible disclosure of confidential employer information, occupations have been added to the appropriate "all other" or residual category if: less than three firms reported a single occupation; one firm reported more than 50 percent of the occupational estimate; two firms combined reported more than 75 percent of the occupational estimate. In certain cases, releases have been obtained from large employers to waive the confidentiality criteria.

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

STATEWIDE

	Estimated 1982 Employment	Percent of Total 1982 Employment	Projected 1986 Employment	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	27,577	11.2	32,460	8,891
Directors, Food & Beverage &/or Managers, Catering	216	.1	267	86
Managers, Merchandise	1,944	.8	2,298	562
Managers, Store	13,406	5.4	15,508	4,052
Managers, Automobile Service Department	548	.2	615	146
Managers, Automotive Parts Department	406	.2	454	107
Wholesalers	2,349	1.0	2,832	829
Managers, Restaurant, Coffee Shop or Liquor Estab.	4,284	1.7	5,306	1,708
All Other Managers	4,424	1.8	5,180	1,401
TOTAL PROFESSIONAL WORKERS	5,611	2.3	6,611	1,824
Electrical & Electronic Engineers	105	.1	127	28
Mechanical Engineers	74	.0	88	19
All Other Engineers	59	.0	72	17
All Other Natural & Mathematical Scientists	2	.0	2	0
Chemists	15	.0	18	5
Systems Analysts, Electronic Data Processing	174	.1	209	43
Purchasing Agents &/or Buyers	84	.1	100	27
Buyers, Retail &/or Wholesale Trade	1,522	.6	1,752	461
Accountants & Auditors	825	.3	979	279
Commercial Artists	97	.1	110	31
Writers &/or Editors	30	.0	34	10
Musicians, Instrumental	218	.1	267	82
Personnel & Labor Relations Specialists	162	.1	183	40
Pharmacists	1,031	.4	1,223	423
Public Relations Practitioners	30	.0	36	10
Designers (Excl. Design Engineers)	824	.3	981	227
All Other Professional Workers	359	.1	430	122
TOTAL TECHNICAL WORKERS	1,455	.6	1,744	396
Computer Programmers	219	.1	261	54
Drafters	46	.0	55	13
Electrical & Electronic Technicians	923	.4	1,114	246
Mechanical Engineering Technicians	48	.0	58	12
All Other Engineering Technicians	11	.0	13	3
All Science Technicians	4	.0	5	1
Pharmacy Helpers	85	.0	97	32
All Other Technicians	119	.1	141	35
TOTAL SERVICE WORKERS	64,355	26.0	79,037	26,537
Janitors, Porters & Cleaners	2,778	1.1	3,268	1,005
Guards & Doorkeepers	392	.2	473	105
Bakers, Bread &/or Pastry	654	.3	787	246
Bartenders	2,538	1.0	3,136	980
Dining Room/Cafeteria Attends. & Bartender Helpers	3,933	1.6	4,892	1,191
Butchers &/or Meat Cutters	1,225	.5	1,417	324
Hosts/Hostesses, Restaurant, Lounge or Coffee Shop	1,687	.7	2,089	789
Kitchen Helpers	5,837	2.4	7,178	2,433
Waiters or Waitresses	16,423	6.6	20,263	7,604
Counter Attends., Lunch, Coffee Shop or Cafeteria	1,979	.8	2,403	895
Cooks, Short Order &/or Specialty Fast Foods	3,050	1.2	3,715	1,150
Cooks, Restaurant (Excl. Supervisory Chefs)	5,088	2.1	6,286	2,010
Food Preparation & Service Workers, Fast Food Restaurant	15,803	6.4	19,552	6,710
Pantry, Sandwich &/or Coffee Makers	833	.3	1,035	358
Cooks, Institution	249	.1	305	96
All Other Food Service Workers	362	.1	448	154
Cosmetologists &/or Women's Hairstylists	152	.1	172	60
Supervisors, Nonworking - Service	362	.1	441	120

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

STATEWIDE (CONTD.)

	Estimated 1982 Employment	Percent of Total 1982 Employment	Projected 1986 Employment	Total Job Openings 1982-1986
Checkers, Fitting Room	83	.0	89	16
Store Detectives	402	.2	454	74
All Other Service Workers	525	.2	634	217
TOTAL MAINTENANCE & PRODUCTION WORKERS	48,227	19.5	56,524	12,622
Mechanics, Aircraft	72	.0	86	18
Protective-Signal Installers &/or Repairers	6	.0	7	2
Mechanics, Automotive	4,379	1.8	5,015	1,000
Body Repairers, Automotive	557	.2	635	122
Bicycle Repairers	106	.0	127	31
Camera Repairers	8	.0	10	2
Diesel Mechanics (Excl. Auto & Eng. Equip.)	651	.3	773	180
Electric Motor Repairers	146	.1	177	44
Farm Equipment Mechanics	84	.0	100	22
Gasoline Engine or Mower Repairers	35	.0	42	11
Engineering Equipment Mechanics	502	.2	605	145
Laundry Machine Mechanics	36	.0	39	6
Locksmiths	9	.0	11	3
Marine Mechanics &/or Repairers	27	.0	30	6
Mechanics, Maintenance (Excl. Millwrights)	108	.0	122	24
Office Machine &/or Cash Register Servicers	620	.3	747	186
Refrigeration/Air Conditioning Mechanics	65	.0	74	16
TV Servicers & Repairers, Radio &/or Tape Recorder Repairers	275	.1	322	65
Coin-Machine Servicers &/or Vending Machine Repairers	129	.1	156	39
Motorboat Mechanics	39	.0	43	8
Mechanics, Sewing Machine	7	.0	8	2
Data Processing Machine Repairers	367	.2	444	98
Gas & Electric Appliance Repairers	266	.1	303	68
Elevator Installers &/or Repairers	61	.0	74	19
All Other Mechanics & Repairers	180	.1	213	50
Shoe Repairers	10	.0	11	5
Truck Drivers	2,400	1.0	2,861	642
Automobile Repair/Service Estimators	115	.1	133	28
Cabinetmakers (Excl. Carpenters)	360	.2	429	101
Carpet Cutters &/or Layers	124	.1	147	30
Carpenters (Excl. Cabinetmakers)	140	.1	167	45
Cleaners, Vehicle	614	.3	695	115
Crane, Derrick & Hoist Operators	42	.0	50	13
Delivery & Route Workers	5,053	2.0	6,048	1,353
Merchandise Displayers & Window Trimmers	139	.1	152	41
Electricians	11	.0	13	3
Supervisors, Nonworking	1,290	.5	1,537	394
Furnace Installers & Repairers, Hot Air	11	.0	13	4
Glaziers	79	.0	94	23
Heavy Equipment Operators	10	.0	12	2
Industrial Truck Operators	502	.2	600	135
Instrument Repairers	47	.0	57	14
Jewelers &/or Silversmiths	213	.1	254	81
Machinists	204	.1	241	59
Maintenance Repairers, General Utility	1,038	.4	1,236	296
Helpers, Trades	388	.2	441	97
Marine Service Station Attendants	23	.0	24	3
Musical Instrument Repairers	32	.0	39	10
Order Fillers	1,653	.7	1,992	445
Painters, Automotive	174	.1	200	47
Painters, Maintenance (Excl. Production Painters)	19	.0	22	6
Plumbers &/or Pipefitters	44	.0	53	14
Pr[illegible]ion Packagers, Hand or Machine	593	.2	697	199
Custom Sewers (Excl. Alteration)	40	.0	43	16
Sewing Machine Opers., Regular Equip.-Garment	71	.0	80	18
Sewing Machine Opers., Special Equip.-Garment	37	.0	44	12
Sewing Machine Opers., Regular Equip.-Nongarment	97	.0	114	31

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

STATEWIDE (CONTD.)

	Estimated 1982 Employment	Percent of Total 1982 Employment	Projected 1986 Employment	Total Job Openings 1982-1986
Sewing Machine Opers., Special &/or Automatic Equip.-Nongarment	167	.1	201	57
Stationary Engineers	26	.0	28	5
Alteration Tailors	274	.1	295	68
Tire Fabricators &/or Repairers	278	.1	327	81
Watchmakers	44	.0	52	12
Welders & Flamecutters	140	.1	168	45
Furniture Assemblers & Installers	177	.1	214	57
Baggers	3,610	1.5	4,219	839
Fuel Pump Attendants &/or Lubricators	3,597	1.5	4,060	874
Tire Changers	636	.3	721	158
Opticians, Dispensing &/or Optical Mechanics	164	.1	198	63
Drapery Hangers	48	.0	57	19
Household Appliance Installers	65	.0	72	15
Stock Clerks, Sales Floor	7,014	2.8	8,102	1,534
Furniture Finishers	96	.0	114	23
Furniture Upholsterers	52	.0	60	16
All-Around Tailors	21	.0	23	5
Bakers	320	.1	382	117
Cake Decorators	60	.0	70	21
Doughnut Makers &/or Doughnut Machine Opers.	23	.0	27	7
Wood Machinists	134	.1	161	42
Variety Saw Operators	12	.0	15	4
Woodworking Machine Operators	13	.0	16	5
Conveyor Operators & Tenders	77	.0	93	25
Ceiling Tile Installers &/or Floor Layers	101	.0	121	15
Truck Driver Helpers	19	.0	23	6
Mobile Home Repairers	130	.1	151	33
Mobile Home Set-Up Operators	89	.0	105	26
Picture Framers	53	.0	64	17
All Other Skilled Craft Workers	461	.2	552	134
All Other Operatives & Semiskilled Workers	1,693	.7	2,023	527
All Other Laborers & Unskilled Workers	4,325	1.7	5,148	1,323
TOTAL CLERICAL WORKERS	41,266	16.7	48,209	14,903
Bookkeeping &/or Billing Machine Operators	510	.2	607	195
Computer Operators	237	.1	282	71
Keypunch Operators	226	.1	265	89
Peripheral EDP Equipment Operators	102	.0	120	43
All Other Office Machine Operators	129	.0	149	57
Stenographers	28	.0	34	12
Accounting Clerks	2,529	1.0	2,967	946
Bookkeepers, Hand	3,008	1.2	3,560	1,158
Adjustment Clerks	312	.1	348	104
Cashiers (Include Cashier-Checkers)	13,569	5.5	15,701	4,968
Collectors	312	.1	364	100
File Clerks	76	.0	88	33
General Clerks, Office	5,282	2.1	6,193	2,075
Credit Authorizers	184	.1	207	63
Order Clerks	1,412	.6	1,682	575
Payroll &/or Timekeeping Clerks	166	.1	188	52
Personnel Clerks	138	.1	154	54
Procurement Clerks	35	.0	42	11
Credit Reference Clerks	140	.1	162	53
Receptionists	163	.1	194	74
Secretaries	1,983	.8	2,357	840
Service Clerks	348	.1	392	120
Switchboard Operators	160	.1	182	65
Switchboard Operators/Receptionists	287	.1	338	128
Typists	424	.2	509	198
Clerical Supervisors, Office or Plant	582	.2	681	172
All Other Office Clerical Workers	534	.2	606	189
Shipping Packers	1,130	.5	1,352	354
Shipping &/or Receiving Clerks	1,653	.7	1,949	447

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

STATEWIDE (CONTD.)

	Estimated 1982 Employment	Percent of Total 1982 Employment	Projected 1986 Employment	Total Job Openings 1982-1986
Weighers, Record Keeping	55	.0	65	17
Stock Clerks, Stockroom, Warehouse or Storage	4,652	1.9	5,456	1,343
Dispatchers, Vehicle, Service or Work	133	.1	157	39
Marking Clerks	678	.3	754	223
All Other Plant Clerical Workers	89	.0	104	35
TOTAL SALES WORKERS	58,541	23.7	67,583	16,784
Sales Representatives, Agents &/or Associates	28,255	11.4	32,903	8,336
Sales Clerks (Excl. Cashiers)	28,517	11.6	32,649	7,836
Demonstrators	106	.0	117	29
Sales Clerk Supervisors	1,273	.5	1,468	462
All Other Sales Workers	390	.2	446	121
TOTAL ALL OCCUPATIONS	247,032	100.0	292,168	81,957

Confidential data for certain occupations, and data for occupations with employment of less than five, have been added to "All" or "All Others" categories or collapsed into major occupational classes as follows:

PROFESSIONAL WORKERS

- All Other Engineers
  - Chemical Engineers

- All Other Professional Workers
  - Lawyers
  - Physicians &/or Surgeons

MAINTENANCE & PRODUCTION WORKERS

- All Other Skilled Craft Workers
  - Custom Tailors

- All Other Operatives & Semiskilled Workers
  - Drapery & Upholstery Measurers

- All Other Laborers & Unskilled Workers
  - Oilers

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

APACHE COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	111	120	9	15	24
Managers, Merchandise	5	5	0	1	1
Managers, Store	80	87	7	11	18
Managers, Restaurant, Coffee Shop or Liquor Estab.	6	7	1	1	2
All Other Managers	20	21	1	2	3
TOTAL PROFESSIONAL WORKERS	9	10	1	2	3
TOTAL SERVICE WORKERS	184	217	33	34	67
Janitors, Porters & Cleaners	8	9	1	1	2
Butchers &/or Meat Cutters	11	12	1	1	2
Kitchen Helpers	18	21	3	3	6
Waiters or Waitresses	52	62	10	12	22
Cooks, Short Order &/or Specialty Fast Foods	32	39	7	5	12
Cooks, Restaurant (Excl. Supervisory Chefs)	12	14	2	2	4
Food Preparation & Service Workers, Fast Food Restaurant	36	43	7	7	14
All Other Food Service Workers	15	17	2	3	5
TOTAL MAINTENANCE & PRODUCTION WORKERS	125	135	10	10	20
Mechanics, Automotive	16	17	1	1	2
All Other Mechanics & Repairers	4	5	1	0	1
Delivery & Route Workers	10	11	1	1	2
Fuel Pump Attendants &/or Lubricators	36	39	3	4	7
Stock Clerks, Sales Floor	33	36	3	2	5
All Other Skilled Craft Workers	4	4	0	1	1
All Other Operatives & Semiskilled Workers	15	16	1	1	2
All Other Laborers & Unskilled Workers	7	7	0	0	0
TOTAL CLERICAL WORKERS	220	237	17	43	60
Bookkeepers, Hand	12	13	1	2	3
Cashiers (Include Cashier-Checkers)	172	185	13	35	48
General Clerks, Office	12	13	1	3	4
All Other Office Clerical Workers	7	7	0	1	1
Stock Clerks, Stockroom, Warehouse or Storage	15	17	2	2	4
All Other Plant Clerical Workers	2	2	0	0	0
TOTAL SALES WORKERS	304	329	25	39	64
All Sales Representatives, Agents, &/or Associates	45	48	3	6	9
Sales Clerks (Excl. Cashiers)	257	279	22	33	55
All Other Sales Workers	2	2	0	0	0
TOTAL ALL OCCUPATIONS	953	1,048	95	143	238

Confidential data for certain occupations, and data for occupations with employment of less than five, have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

MANAGERS & OFFICERS

All Other Managers
- Managers, Automobile Service Department
- Managers, Automotive Parts Department
- Wholesalers

PROFESSIONAL WORKERS

- Buyers
- Pharmacists

SERVICE WORKERS

All Other Food Service Workers
- Bakers, Bread &/or Pastry
- Bartenders
- Dining Room/Cafeteria Attendants & Bartender Helpers
- Hosts/Hostesses, Restaurant, Lounge or Coffee Shop
- Counter Attends., Lunch, Coffee Shop or Cafeteria

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

APACHE COUNTY (CONTD.)

MAINTENANCE & PRODUCTION WORKERS

All Other Mechanics & Repairers
- Gas & Electric Appliance Repairers

All Other Skilled Craft Workers
- Jewelers &/or Silversmiths

All Other Operatives & Semiskilled Workers
- Truck Drivers
- Marine Service Station Attendants
- Tire Changers

All Other Laborers & Unskilled Workers
- Helpers, Trades
- Baggers

CLERICAL WORKERS

All Other Office Clerical Workers
- Accounting Clerks
- Payroll &/or Timekeeping Clerks
- Secretaries
- Clerical Supervisors, Office or Plant

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

COCHISE COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	451	497	46	64	110
Managers, Merchandise	33	38	5	3	8
Managers, Store	269	292	23	38	61
Managers, Automobile Service Department	12	12	0	2	2
Managers, Automotive Parts Department	15	15	0	2	2
Managers, Restaurant, Coffee Shop or Liquor Estab.	58	70	12	9	21
All Other Managers	64	70	6	10	16
TOTAL PROFESSIONAL WORKERS	64	73	9	11	20
Buyers, Retail &/or Wholesale Trade	17	19	2	3	5
Accountants & Auditors	9	10	1	1	2
Pharmacists	23	26	3	5	8
All Other Professional Workers	15	18	3	2	5
TOTAL TECHNICAL WORKERS	1	1	0	0	0
TOTAL SERVICE WORKERS	1,192	1,417	225	220	445
Janitors, Porters & Cleaners	73	83	10	13	23
Guards & Doorkeepers	1	1	0	0	0
Bakers, Bread &/or Pastry	15	18	3	3	6
Bartenders	81	97	16	12	28
Dining Room/Cafeteria Attends. & Bartender Helpers	19	23	4	1	5
Butchers &/or Meat Cutters	50	54	4	5	9
Kitchen Helpers	115	138	23	21	44
Waiters or Waitresses	332	399	67	76	143
Counter Attends., Lunch, Coffee Shop or Cafeteria	31	36	5	7	12
Cooks, Short Order &/or Specialty Fast Foods	131	155	24	21	45
Cooks, Restaurant (Excl. Supervisory Chefs)	92	111	19	15	34
Food Preparation & Service Workers, Fast Food Restaurant	223	268	45	41	86
Pantry, Sandwich &/or Coffee Makers	7	8	1	1	2
All Other Food Service Workers	5	6	1	1	2
Supervisors, Nonworking - Service	9	11	2	1	3
All Other Service Workers	8	9	1	2	3
TOTAL MAINTENANCE & PRODUCTION WORKERS	732	786	54	58	112
Mechanics, Automotive	86	89	3	7	10
Body Repairers, Automotive	18	18	0	1	1
Gas & Electric Appliance Repairers	10	11	1	1	2
All Other Mechanics & Repairers	22	23	1	0	1
Truck Drivers	28	31	3	2	5
Cleaners, Vehicle	12	12	0	1	1
Delivery & Route Workers	60	68	8	4	12
Jewelers &/or Silversmiths	6	7	1	1	2
Helpers, Trades	16	17	1	2	3
Order Fillers	8	9	1	1	2
Production Packagers, Hand or Machine	12	13	1	2	3
Baggers	78	84	6	5	11
Fuel Pump Attendants &/or Lubricators	100	105	5	11	16
Tire Changers	7	8	1	1	2
Stock Clerks, Sales Floor	174	187	13	11	24
All Other Skilled Craft Workers	47	51	4	3	7
All Other Operatives & Semiskilled Workers	15	16	1	1	2
All Other Laborers & Unskilled Workers	33	37	4	4	8
TOTAL CLERICAL WORKERS	660	719	59	127	186
Bookkeeping &/or Billing Machine Operators	7	8	1	1	2
All Other Office Machine Operators	3	3	0	1	1
Accounting Clerks	29	32	3	6	9
Bookkeepers, Hand	66	73	7	13	20

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

COCHISE COUNTY (CONTD.)

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Cashiers (Include Cashier-Checkers)	343	372	29	70	99
General Clerks, Office	64	70	6	14	20
Order Clerks	11	12	1	2	3
Secretaries	20	22	2	5	7
Service Clerks	9	9	0	2	2
Typists	8	9	1	2	3
All Other Office Clerical Workers	12	12	0	1	1
Shipping &/or Receiving Clerks	19	21	2	2	4
Stock Clerks, Stockroom, Warehouse or Storage	64	71	7	7	14
All Other Plant Clerical Workers	5	5	0	1	1
TOTAL SALES WORKERS	932	1,020	88	120	208
Sales Representatives, Agents &/or Associates	303	329	26	39	65
Sales Clerks (Excl. Cashiers)	624	686	62	80	142
All Other Sales Workers	5	5	0	1	1
TOTAL ALL OCCUPATIONS	4,032	4,513	481	600	1,081

Confidential data for certain occupations, and data for occupations with employment of less than five, have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

MANAGERS & OFFICERS

- All Other Managers & Officers
  - Directors, Food & Beverage &/or Managers, Catering
  - Wholesalers

PROFESSIONAL WORKERS

- All Other Professional Workers
  - Designers

SERVICE WORKERS

- All Other Food Service Workers
  - Hosts/Hostesses, Restaurant, Lounge or Coffee Shop
  - Cooks, Institution

MAINTENANCE & PRODUCTION WORKERS

- All Other Mechanics & Repairers
  - Farm Equipment Mechanics
  - Gasoline Engine or Mower Repairers
  - Laundry Machine Mechanics
  - Mechanics, Maintenance (Excl. Millwrights)
  - Office Machine &/or Cash Register Servicers
  - Refrigeration/Air Conditioning Mechanics
  - TV Servicers & Repairers, Radio &/or Tape Recorder Repairers
  - Motorboat Mechanics

- All Other Skilled Craft Workers
  - Automobile Repair/Service Estimators
  - Cabinetmakers (Excl. Carpenters)
  - Merchandise Displayers & Window Trimmers
  - Supervisors, Nonworking

MAINTENANCE & PRODUCTION WORKERS (CONTD.)

  - Glaziers
  - Machinists
  - Maintenance Repairers, General Utility
  - Painters, Automotive
  - Stationary Engineers
  - Watchmakers
  - Household Appliance Installers
  - Cake Decorators
  - Ceiling Tile Installers &/or Floor Layers

- All Other Operatives & Semiskilled Workers
  - Carpet Cutters &/or Layers
  - Industrial Truck Operators
  - Doughnut Makers &/or Doughnut Machine Operators
  - Truck Driver Helpers
  - Mobile Home Set-Up Operators

- All Other Laborers & Unskilled Workers
  - Mobile Home Repairers

CLERICAL WORKERS

- All Other Office Machine Operators
  - Computer Operators

- All Other Office Clerical Workers
  - Adjustment Clerks
  - Credit Authorizers
  - Payroll &/or Timekeeping Clerks
  - Receptionists
  - Clerical Supervisors, Office or Plant

SALES WORKERS

- All Other Sales Workers
  - Sales Clerk Supervisors

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

COCONINO COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	701	784	83	102	185
Directors, Food & Beverage &/or Managers, Catering	8	10	2	1	3
Managers, Merchandise	33	37	4	3	7
Managers, Store	362	393	31	52	83
Managers, Automobile Service Department	20	21	1	3	4
Managers, Automotive Parts Department	6	6	0	1	1
Wholesalers	34	39	5	5	10
Managers, Restaurant, Coffee Shop or Liquor Estab.	162	195	33	26	59
All Other Managers	76	83	7	11	18
TOTAL PROFESSIONAL WORKERS	122	135	13	18	31
Buyers, Retail &/or Wholesale Trade	62	68	6	9	15
Accountants & Auditors	14	15	1	2	3
Pharmacists	22	25	3	5	8
Designers (Excl. Design Engineers)	12	14	2	1	3
All Other Professional Workers	12	13	1	1	2
TOTAL TECHNICAL WORKERS	14	16	2	1	3
All Engineering Technicians	13	15	2	1	3
All Medical & Dental Technicians	1	1	0	0	0
TOTAL SERVICE WORKERS	2,459	2,945	486	454	940
Janitors, Porters & Cleaners	60	68	8	11	19
Guards & Doorkeepers	7	8	1	0	1
Bakers, Bread &/or Pastry	13	15	2	2	4
Bartenders	91	110	19	14	33
Dining Room/Cafeteria Attends. & Bartender Helpers	151	182	31	9	40
Butchers &/or Meat Cutters	45	48	3	5	8
Hosts/Hostesses, Restaurant, Lounge or Coffee Shop	68	82	14	15	29
Kitchen Helpers	281	338	57	52	109
Waiters or Waitresses	727	873	146	165	311
Counter Attends., Lunch, Coffee Shop or Cafeteria	85	101	16	20	36
Cooks, Short Order &/or Specialty Fast Foods	124	149	25	20	45
Cooks, Restaurant (Excl. Supervisory Chefs)	224	270	46	35	81
Food Preparation & Service Workers, Fast Food Restaurant	500	602	102	93	195
Pantry, Sandwich &/or Coffee Makers	18	22	4	3	7
Supervisors, Nonworking - Service	27	32	5	3	8
All Other Service Workers	38	45	7	7	14
TOTAL MAINTENANCE & PRODUCTION WORKERS	1,184	1,274	90	98	188
Mechanics, Automotive	141	147	6	11	17
Body Repairers, Automotive	19	19	0	1	1
Gas & Electric Appliance Repairers	10	11	1	1	2
All Other Mechanics & Repairers	36	38	2	2	4
Truck Drivers	77	86	9	6	15
Baggers	69	74	5	4	9
Production Packagers, Hand or Machine	7	8	1	1	2
Cleaners, Vehicle	9	9	0	0	0
Delivery & Route Workers	143	162	19	10	29
Supervisors, Non-working	10	11	1	1	2
Industrial Truck Operators	12	13	1	1	2
Jewelers &/or Silversmiths	9	10	1	2	3
Maintenance Repairers, General Utiltiy	41	47	6	4	10
Helpers, Trades	10	10	0	1	1
Order Fillers	10	12	2	1	3
Fuel Pump Attendants &/or Lubricators	226	234	8	25	33
Tire Changers	10	10	0	1	1

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

COCONINO COUNTY (CONTD.)

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Stock Clerks, Sales Floor	231	248	17	14	31
All Other Skilled Craft Workers	46	49	3	4	7
All Other Operatives & Semiskilled Workers	22	23	1	3	4
All Other Laborers & Unskilled Workers	46	53	7	5	12
TOTAL CLERICAL WORKERS	1,027	1,129	102	201	303
Bookkeeping &/or Billing Machine Operators	23	26	3	4	7
All Other Office Machine Operators	9	9	0	2	2
Accounting Clerks	44	49	5	9	14
Bookkeepers, Hand	82	92	10	16	26
Cashiers (Include Cashier-Checkers)	517	570	53	107	160
General Clerks, Office	96	105	9	21	30
Order Clerks	13	15	2	3	5
Secretaries	26	29	3	6	9
Service Clerks	5	5	0	1	1
Switchboard Operators	6	7	1	2	3
Clerical Supervisors, Office or Plant	9	10	1	1	2
All Other Office Clerical Workers	65	68	3	13	16
Shipping &/or Receiving Clerks	30	34	4	3	7
Stock Clerks, Stockroom, Warehouse or Storage	79	86	7	9	16
Marking Clerks	19	20	1	4	5
All Other Plant Clerical Workers	4	4	0	0	0
TOTAL SALES WORKERS	1,163	1,277	114	151	265
Sales Representatives, Agents &/or Associates	379	413	34	49	83
Sales Clerks (Excl. Cashiers)	760	838	78	98	176
All Other Sales Workers	24	26	2	4	6
TOTAL ALL OCCUPATIONS	6,670	7,560	890	1,025	1,915

Confidential data for certain occupations, and data for occupations with employment of less than five, have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL WORKERS

All Other Professionals
- Commercial Artists
- Musicians, Instrumental
- Personnel & Labor Relations Specialists

TECHNICAL WORKERS

All Engineering Technicians
- Computer Programmers
- Electrical & Electronic Technicians

SERVICE WORKERS

All Other Service Workers
- Cooks, Institution
- Store Detectives

MAINTENANCE & PRODUCTION WORKERS

All Other Mechanics & Repairers
- Bicycle Repairers
- Laundry Machine Mechanics
- Marine Mechanics &/or Repairers
- Mechanics, Maintenance (Excl. Millwrights)
- Office Machine &/or Cash Register Servicers
- TV Servicers & Repairers, Radio &/or Tape Recorder Repairers
- Coin-Machine Servicers &/or Vending Machine Repairers
- Motorboat Mechanics

MAINTENANCE & PRODUCTION WORKERS (CONTD.)

All Other Skilled Craft Workers
- Shoe Repairers
- Cabinetmakers (Excl. Carpenters)
- Merchandise Displayers & Window Trimmers
- Electricians
- Carpenters
- Painters, Automotive
- Plumbers &/or Pipefitters
- Watchmakers
- Household Appliance Installers
- Furniture Finishers
- Furniture Upholsterers

All Other Operatives & Semiskilled Workers
- Carpet Cutters &/or Layers
- Tire Fabricators &/or Repairers
- Welders & Flamecutters
- Drapery Hangers
- Doughnut Makers &/or Machine Opers.

All Other Laborers & Unskilled Workers
- Painters, Maintenance (Excl. Production Painters)

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

COCONINO COUNTY (CONTD.)

CLERICAL WORKERS

All Other Office Machine Operators
 Computer Operators
 Keypunch Operators

All Other Office Clericals
 Adjustment Clerks
 Collectors
 Credit Authorizers
 Payroll &/or Timekeeping Clerks
 Personnel Clerks
 Credit Reference Clerks
 Switchboard Operators/Receptionists
 Typists

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

GILA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-198
TOTAL MANAGERS & OFFICERS	154	169	15	22	37
Managers, Merchandise	8	9	1	1	2
Managers, Store	79	85	6	11	17
Managers, Automobile Service Department	6	6	0	1	1
Managers, Automotive Parts Department	8	8	0	1	1
Wholesalers	7	8	1	1	2
Managers, Restaurant, Coffee Shop or Liquor Estab.	30	36	6	5	11
All Other Managers	16	17	1	2	3
TOTAL PROFESSIONAL WORKERS	28	32	4	5	9
Buyers, Retail &/or Wholesale Trade	6	7	1	1	2
Pharmacists	11	13	2	2	4
All Other Professional Workers	11	12	1	2	3
TOTAL SERVICE WORKERS	783	935	152	146	298
Janitors, Porters & Cleaners	25	29	4	5	9
Bartenders	29	35	6	4	10
Dining Room/Cafeteria Attends. & Bartender Helpers	13	16	3	1	4
Butchers &/or Meat Cutters	27	29	2	3	5
Hosts/Hostesses, Restaurant, Lounge or Coffee Shop	5	6	1	1	2
Kitchen Helpers	53	64	11	10	21
Waiters or Waitresses	174	209	35	40	75
Cooks, Short Order &/or Specialty Fast Foods	72	84	12	11	23
Cooks, Restaurant (Excl. Supervisory Chefs)	48	58	10	8	18
Food Preparation & Service Workers, Fast Food Restaurant	330	397	67	61	128
All Other Food Service Workers	7	8	1	2	3
TOTAL MAINTENANCE & PRODUCTION WORKERS	321	342	21	21	42
Mechanics, Automotive	43	44	1	3	4
Body Repairers, Automotive	6	6	0	0	0
Gas & Electric Appliance Repairers	6	7	1	1	2
All Other Mechanics & Repairers	4	4	0	0	0
Truck Drivers	11	13	2	1	3
Cleaners, Vehicle	8	8	0	0	0
Delivery & Route Workers	23	26	3	2	5
Helpers, Trades	6	6	0	1	1
Baggers	39	42	3	2	5
Fuel Pump Attendants &/or Lubricators	40	41	1	4	5
Stock Clerks, Sales Floor	101	109	8	6	14
All Other Skilled Craft Workers	8	8	0	0	0
All Other Operatives & Semiskilled Workers	18	20	2	0	2
All Other Laborers & Unskilled Workers	8	8	0	1	1
TOTAL CLERICAL WORKERS	252	273	21	51	72
All Office Machine Operators	1	1	0	0	0
Accounting Clerks	14	15	1	3	4
Bookkeepers, Hand	33	37	4	7	11
Cashiers (Include Cashier-Checkers)	164	177	13	34	47
General Clerks, Office	13	14	1	3	4
All Other Office Clerical Workers	12	13	1	2	3
Stock Clerks, Stockroom, Warehouse or Storage	10	11	1	1	2
All Other Plant Clerical Workers	5	5	0	1	1
TOTAL SALES WORKERS	264	287	23	34	57
Sales Representatives, Agents &/or Associates	82	88	6	10	16
Sales Clerks (Excl. Cashiers)	178	195	17	23	40
All Other Sales Workers	4	4	0	1	1
TOTAL ALL OCCUPATIONS	1,802	2,038	236	279	515

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

GILA COUNTY (CONTD.)

onfidential data for certain occupations, and data for occupations with employment of less than five, have been added o "All" or "All Other" categories or collapsed into major occupational classes as follows:

ROFESSIONAL WORKERS

- All Other Professional Workers
  - Accountants & Auditors
  - Musicians, Instrumental
  - Designers (Excl. Design Engineers)

ERVICE WORKERS

- All Other Food Service Workers
  - Bakers, Bread &/or Pastry
  - Counter Attends., Lunch, Coffee Shop or Cafeteria

AINTENANCE & PRODUCTION WORKERS

- All Other Mechanics & Repairers
  - Laundry Machine Mechanics
  - Mechanics, Maintenance (Excl. Millwrights)
  - TV Servicers & Repairers, Radio &/or Tape Recorder Repairers

- All Other Skilled Craft Workers
  - Supervisors, Nonworking
  - Painters, Automotive
  - Household Appliance Installers
  - Furniture Upholsterers

MAINTENANCE & PRODUCTION WORKERS (CONTD.)

- All Other Operatives & Semiskilled Workers
  - Carpet Cutters &/or Layers
  - Industrial Truck Operators
  - Tire Changers
  - Doughnut Makers &/or Doughnut Machine Opers.

- All Other Laborers & Unskilled Workers
  - Production Packagers, Hand or Machine

CLERICAL WORKERS

- All Other Office Clerical Workers
  - Adjustment Clerks
  - Order Clerks
  - Secretaries
  - Service Clerks
  - Clerical Supervisors, Office or Plant

- All Other Plant Clerical Workers
  - Shipping &/or Receiving Clerks
  - Marking Clerks

SALES WORKERS

- All Other Sales Workers
  - Sales Clerk Supervisors

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

GRAHAM COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	139	155	16	19	35
Managers, Merchandise	7	8	1	1	2
Managers, Store	65	70	5	9	14
Wholesalers	9	10	1	1	2
Managers, Restaurant, Coffee Shop or Liquor Estab.	28	34	6	4	10
All Other Managers	30	33	3	4	7
TOTAL PROFESSIONAL WORKERS	17	19	2	2	4
Pharmacists	6	7	1	1	2
All Other Professional Workers	11	12	1	1	2
TOTAL TECHNICAL WORKERS	1	1	0	0	0
TOTAL SERVICE WORKERS	402	479	77	72	149
Janitors, Porters & Cleaners	17	19	2	3	5
Butchers &/or Meat Cutters	16	17	1	2	3
Kitchen Helpers	29	35	6	5	11
Waiters or Waitresses	52	63	11	12	23
Cooks, Short Order &/or Specialty Fast Foods	45	54	9	7	16
Cooks, Restaurant (Excl. Supervisory Chefs)	28	34	6	4	10
Food Preparation & Service Workers, Fast Food Restaurant	196	235	39	36	75
All Other Food Service Workers	17	20	3	3	6
All Other Service Workers	2	2	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	297	320	23	21	44
Mechanics, Automotive	37	39	2	3	5
All Other Mechanics & Repairers	19	21	2	1	3
Cleaners, Vehicle	7	7	0	0	0
Delivery & Route Workers	45	52	7	3	10
Tire Fabricators &/or Repairers	9	9	0	1	1
Baggers	46	49	3	3	6
Fuel Pump Attendants &/or Lubricators	24	25	1	3	4
Stock Clerks, Sales Floor	60	64	4	4	8
All Other Skilled Craft Workers	17	18	1	1	2
All Other Operatives & Semiskilled Workers	17	19	2	1	3
All Other Laborers & Unskilled Workers	16	17	1	1	2
TOTAL CLERICAL WORKERS	179	195	16	35	51
All Office Machine Operators	4	5	1	1	2
Bookkeepers, Hand	24	27	3	5	8
Cashiers (Include Cashier-Checkers)	93	101	8	19	27
General Clerks, Office	29	32	3	6	9
All Other Office Clerical Workers	9	9	0	2	2
Shipping &/or Receiving Clerks	5	5	0	0	0
Stock Clerks, Stockroom, Warehouse or Storage	15	16	1	2	3
TOTAL SALES WORKERS	254	276	22	33	55
Sales Representatives, Agents &/or Associates	100	108	8	13	21
Sales Clerks (Excl. Cashiers)	154	168	14	20	34
TOTAL ALL OCCUPATIONS	1,289	1,445	156	182	338

Confidentinal data for certain occupations, and data for occupations with employment of less than five, have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

MANAGER & OFFICERS	PROFESSIONAL WORKERS
All Other Managers	All Other Professional Workers
Managers, Automobile Service Department	Buyers
Managers, Automotive Parts Department	Designers

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

GRAHAM COUNTY (CONTD.)

SERVICE WORKERS

- All Other Food Service Workers
  - Bakers, Bread &/or Pastry
  - Bartenders
  - Dining Room/Cafeteria Attendants & Bartender Helpers
  - Host/Hostesses, Restaurant, Lounge or Coffee Shop
  - Counter Attends, Lunch, Coffee Shop or Cafeteria

MAINTENANCE & PRODUCTION WORKERS

- All Other Mechanics & Repairers
  - Body Repairers, Automotive
  - Diesel Mechanics
  - Farm Equipment Mechanics
  - Laundry Machine Mechanics
  - Mechanics, Maintenance (Excl. Millwrights)
  - Office Machine &/or Cash Register Servicers
  - TV Servicers & Repairers, Radio &/or Tape Recorder Repairers
  - Gas & Electric Appliance Repairers

MAINTENANCE & PRODUCTION WORKERS (CONTD.)

- All Other Skilled Craft Workers
  - Bakers
  - Carpenters
  - Supervisors, Nonworking
  - Glaziers
  - Machinists
  - Maintenance Repairers, General Utility
  - Tire Fabricators &/or Repairers
  - Household Appliance Installers

- All Other Operatives & Semiskilled Workers
  - Truck Drivers
  - Industrial Truck Operators
  - Welders & Flamecutters
  - Furniture Assemblers & Installers
  - Tire Changers
  - Mobile Home Set-Up Operators

- All Other Laborers & Unskilled Workers
  - Helpers, Trades
  - Order Fillers
  - Production Packagers, Hand or Machine

CLERICAL WORKERS

- All Office Machine Operators
  - Bookkeeping &/or Billing Machine Operators

- All Other Office Clerical Workers
  - Accounting Clerks
  - Order Clerks
  - Secretaries

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

GREENLEE COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	40	43	3	5	8
Managers, Store	18	19	1	3	4
All Other Managers	22	24	2	2	4
TOTAL PROFESSIONAL WORKERS	6	6	0	1	1
TOTAL SERVICE WORKERS	94	108	14	17	31
Janitors, Porters & Cleaners	6	7	1	1	2
Kitchen Helpers	13	15	2	2	4
Waiters or Waitresses	27	31	4	6	10
Cooks, Restaurant (Excl. Supervisory Chefs)	11	13	2	2	4
All Other Food Service Workers	34	39	5	5	10
All Other Service Workers	3	3	0	1	1
TOTAL MAINTENANCE & PRODUCTION WORKERS	61	63	2	4	6
All Mechanics & Repairers	5	5	0	0	0
All Operatives & Semiskilled Workers	52	54	2	4	6
All Laborers & Unskilled Workers	4	4	0	0	0
TOTAL CLERICAL WORKERS	32	33	1	6	7
Cashiers (Include Cashiers-Checkers)	12	13	1	2	3
General Clerks, Office	7	7	0	2	2
All Other Office Clerical Workers	10	10	0	2	2
All Plant Clerical Workers	3	3	0	0	0
TOTAL SALES WORKERS	81	88	7	10	17
Sales Clerks (Excl. Cashiers)	66	72	6	8	14
All Sales Representatives, Agents &/or Associates	15	16	1	2	3
TOTAL ALL OCCUPATIONS	314	341	27	43	70

Confidential data for certain occupations, and data for occupations with employment of less than five, have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

MANAGERS & OFFICERS

- All Other Managers
  - Managers, Automotive Parts Department
  - Managers, Restaurant, Coffee Shop or Liquor Estab.

PROFESSIONAL WORKERS

- Buyers, Retail &/or Wholesale Trade
- Pharmacists

SERVICE WORKERS

- All Other Food Service Workers
  - Bartenders
  - Dining Room/Cafeteria Attendants
  - Butchers &/or Meat Cutters
  - Counter Attends., Lunch, Coffee Shop & Cafeteria
  - Cooks, Short Order &/or Specialty Fast Foods

MAINTENANCE & PRODUCTION WORKERS

- All Mechanics & Repairers
  - Mechanics, Automotive
  - Body Repairers, Automotive

- All Operatives & Semiskilled Workers
  - Delivery & Route Workers
  - Fuel Pump Attendants &/or Lubricators
  - Stock Clerks, Sales Floor

- All Laborers & Unskilled Workers
  - Cleaners, Vehicle
  - Production Packagers, Hand or Machine
  - Baggers

CLERICAL WORKERS

- All Other Office Clerical Workers
  - Accounting Clerks
  - Bookkeepers, Hand
  - Order Clerks

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

MARICOPA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	18,672	22,387	3,715	2,723	6,438
Directors, Food & Beverage &/or Managers, Catering	140	176	36	23	59
Managers, Merchandise	1,401	1,668	267	150	417
Managers, Store	8,782	10,381	1,599	1,285	2,884
Managers, Automobile Service Department	297	357	60	44	104
Managers, Automotive Parts Department	203	245	42	30	72
Wholesalers	1,816	2,196	380	267	647
Managers, Restaurant, Coffee Shop or Liquor Estab.	2,768	3,479	711	445	1,156
All Other Managers	3,265	3,885	620	479	1,099
TOTAL PROFESSIONAL WORKERS	3,947	4,711	764	569	1,333
Electrical & Electronic Engineers	98	118	20	6	26
Mechanical Engineers	61	73	12	4	16
All Other Engineers	53	64	11	4	15
Chemists	9	11	2	1	3
All Other Natural & Mathematical Scientists	2	2	0	0	0
Systems Analysts, Electronic Data Processing	141	170	29	6	35
Purchasing Agents &/or Buyers	71	85	14	9	23
Buyers, Retail &/or Wholesale Trade	1,020	1,195	175	156	331
Accountants & Auditors	675	811	136	103	239
Commercial Artists	71	82	11	13	24
Writers &/or Editors	21	24	3	4	7
Musicians, Instrumental	78	98	20	12	32
Personnel & Labor Relations Specialists	127	146	19	15	34
Pharmacists	646	779	133	145	278
Public Relations Practitioners	27	32	5	4	9
Designers (Excl. Design Engineers)	586	704	118	50	168
All Other Professional Workers	261	317	56	37	93
TOTAL TECHNICAL WORKERS	1,176	1,415	239	81	320
Computer Programmers	180	215	35	9	44
Drafters	35	42	7	3	10
Electrical & Electronic Technicians	786	950	164	47	211
Mechanical Engineering Technicians	46	56	10	2	12
All Other Engineering Technicians	11	13	2	1	3
Pharmacy Helpers	46	53	7	11	18
All Other Technicians	72	86	14	8	22
TOTAL SERVICE WORKERS	39,946	9,879	9,933	7,357	17,290
Janitors, Porters & Cleaners	1,770	2,118	348	330	678
Guards & Doorkeepers	327	400	73	20	93
Bakers, Bread &/or Pastry	430	522	92	75	167
Bartenders	1,485	1,869	384	225	609
Dining Room/Cafeteria Attends. & Bartender Helpers	2,855	3,593	738	169	907
Butchers &/or Meat Cutters	615	736	121	67	188
Hosts/Hostesses, Restaurant, Lounge or Coffee Shop	1,205	1,509	304	277	581
Kitchen Helpers	3,466	4,338	872	652	1,524
Waiters or Waitresses	10,184	2,771	2,587	2,345	4,932
Counter Attends., Lunch, Coffee Shop or Cafeteria	1,199	1,481	282	286	568
Cooks, Short Order &/or Specialty Fast Foods	1,399	1,745	346	224	570
Cooks, Restaurant (Excl. Supervisory Chefs)	3,024	3,803	779	485	1,264
Food Preparation & Service Workers, Fast Food Restaurant	9,720	2,223	2,503	1,830	4,333
Pantry, Sandwich &/or Coffee Makers	623	782	159	117	276
Cooks, Institution	214	266	52	34	86
All Other Food Service Workers	336	417	81	63	144
Cosmetologists &/or Women's Hairstylists	115	133	18	31	49
Supervisors, Nonworking - Service	227	280	53	26	79

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

MARICOPA COUNTY (CONTD.)

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Openings 1982-1986
Checkers, Fitting Room	61	67	6	7	13
Store Detectives	328	377	49	18	67
All Other Service Workers	363	449	86	76	162
TOTAL MAINTENANCE & PRODUCTION WORKERS	33,220	39,823	6,603	3,020	9,623
Mechanics, Aircraft	65	78	13	4	17
Mechanics, Automotive	2,780	3,345	565	234	799
Body Repairers, Automotive	345	416	71	28	99
Bicycle Repairers	76	92	16	7	23
Diesel Mechanics (Excl. Auto & Eng. Equip.)	484	584	100	43	143
Electric Motor Repairers	143	173	30	14	44
Gasoline Engine or Mower Repairers	33	40	7	3	10
Engineering Equipment Mechanics	402	486	84	34	118
Marine Mechanics &/or Repairers	15	18	3	1	4
Mechanics, Maintenance (Excl. Millwrights)	81	93	12	8	20
Office Machine &/or Cash Register Servicers	379	458	79	36	115
Refrigeration/Air Conditioning Mechanics	39	47	8	4	12
TV Servicers & Repairers, Radio &/or Tape Recorder Repairers	161	191	30	11	41
Coin-Machine Servicers &/or Vending Machine Repairers	121	147	26	11	37
Motorboat Mechanics	19	23	4	2	6
Data Processing Machine Repairers	333	402	69	19	88
Gas & Electric Appliance Repairers	158	183	25	18	43
All Other Mechanics & Repairers	309	369	60	29	89
Truck Drivers	1,890	2,277	387	143	530
Automobile Repair/Service Estimators	85	103	18	7	25
Cabinetmakers (Excl. Carpenters)	237	287	50	21	71
Carpet Cutters &/or Layers	67	81	14	4	18
Carpenters (Excl. Cabinetmakers)	82	99	17	11	28
Cleaners, Vehicle	358	432	74	20	94
Crane, Derrick & Hoist Operators	23	34	6	3	9
Delivery & Route Workers	3,440	4,160	720	245	965
Merchandise Displayers & Window Trimmers	107	119	12	22	34
Electricians	7	8	1	1	2
Supervisors, Nonworking	1,009	1,215	206	116	322
Glaziers	51	62	11	5	16
Industrial Truck Operators	330	398	68	25	93
Instrument Repairers	45	54	9	4	13
Jewelers &/or Silversmiths	147	177	30	28	58
Machinists	160	193	33	17	50
Maintenance Repairers, General Utility	717	865	148	68	216
Helpers, Trades	219	264	45	25	70
Musical Instrument Repairers	26	32	6	2	8
Order Fillers	1,407	1,699	292	90	382
Painters, Automotive	118	142	24	14	38
Plumbers &/or Pipefitters	31	38	7	3	10
Production Packagers, Hand or Machine	330	395	65	53	118
Sewing Machine Opers., Regular Equip.-Garment	60	68	8	8	16
Sewing Machine Opers., Special Equip.-Garment	37	44	7	5	12
Sewing Machine Opers., Regular Equip.-Nongarment	92	109	17	13	30
Sewing Machine Opers., Special &/or Automatic Equip.-Nongarment	126	152	26	17	43
Stationary Engineers	18	20	2	2	4
Alteration Tailors	201	220	19	35	54
Tire Fabricators &/or Repairers	218	263	45	26	71
Watchmakers	22	27	5	2	7
Welders & Flamecutters	106	128	22	12	34
Furniture Assemblers & Installers	153	185	32	18	50
Baggers	2,609	3,102	493	167	660
Fuel Pump Attendants &/or Lubricators	1,916	2,308	392	223	615
Tire Changers	398	474	76	46	122
Opticians, Dispensing &/or Optical Mechanics	145	176	31	25	56

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

MARICOPA COUNTY (CONTD.)

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Drapery Hangers	38	45	7	8	15
Household Appliance Installers	31	36	5	4	9
Stock Clerks, Sales Floor	4,191	4,956	765	268	1,033
Furniture Finishers	75	90	15	3	18
Furniture Upholsterers	27	33	6	4	10
All-Around Tailors	18	20	2	3	5
Bakers	258	310	52	45	97
Wood Machinists	84	102	18	10	28
Conveyor Operators & Tenders	77	93	16	9	25
Ceiling Tile Installers &/or Floor Layers	71	86	15	4	19
Mobile Home Repairers	70	85	15	7	22
Mobile Home Set-Up Operators	33	40	7	4	11
Picture Framers	41	50	9	5	14
All Other Skilled Craft Workers	419	503	84	48	132
All Other Operatives & Semiskilled Workers	1,335	1,604	269	158	427
All Other Laborers & Unskilled Workers	3,517	4,215	698	408	1,106
TOTAL CLERICAL WORKERS	28,261	33,613	5,352	5,460	10,812
Bookkeeping &/or Billing Machine Operators	328	397	69	63	132
Computer Operators	193	232	39	22	61
Keypunch Operators	174	204	30	39	69
Peripheral EDP Equipment Operators	92	110	18	22	40
All Other Office Machine Operators	108	125	17	31	48
Stenographers	28	34	6	6	12
Accounting Clerks	1,852	2,205	353	374	727
Bookkeepers, Hand	1,895	2,296	401	384	785
Adjustment Clerks	215	246	31	47	78
Cashiers (Include Cashier-Checkers)	8,072	9,586	1,514	1,700	3,214
Collectors	283	334	51	43	94
File Clerks	68	80	12	19	31
General Clerks, Office	3,775	4,493	718	836	1,554
Credit Authorizers	143	164	21	31	52
Order Clerks	1,111	1,331	220	240	460
Payroll &/or Timekeeping Clerks	121	140	19	22	41
Personnel Clerks	113	127	14	31	45
Procurement Clerks	27	32	5	3	8
Credit Reference Clerks	127	148	21	28	49
Receptionists	127	153	26	34	60
Secretaries	1,572	1,886	314	370	684
Service Clerks	247	288	41	54	95
Switchboard Operators	132	152	20	36	56
Switchboard Operators/Receptionists	224	268	44	60	104
Typists	333	401	68	89	157
Clerical Supervisors, Office or Plant	444	524	80	55	135
All Other Office Clerical Workers	385	448	63	85	148
Shipping Packers	873	1,049	176	102	278
Shipping &/or Receiving Clerks	1,203	1,434	231	110	341
Weighers, Record Keeping	31	37	6	4	10
Stock Clerks, Stockroom, Warehouse or Storage	3,275	3,898	623	380	1,003
Dispatchers, Vehicle, Service or Work	103	124	21	12	33
Marking Clerks	516	581	65	112	177
All Other Plant Clerical Workers	71	86	15	16	31
TOTAL SALES WORKERS	41,145	48,350	7,205	5,434	12,639
Sales Representatives, Agents &/or Associates	21,618	25,567	3,949	2,834	6,783
Sales Clerks (Excl. Cashiers)	18,760	21,912	3,152	2,451	5,603
Demonstrators	86	97	11	15	26
Sales Clerk Supervisors	516	585	69	107	176
All Other Sales Workers	165	189	24	27	51
TOTAL ALL OCCUPATIONS	166,367	200,178	33,811	24,644	58,455

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

MARICOPA COUNTY (CONTD.)

Confidential data for certain occupations, and data for occupations with employment of less than five, have been added to "All" or "All Other" catagories or collapsed into major occupational classes as follows:

PROFESSIONAL WORKERS

All Other Engineers
  Chemical Engineers

All Other Professional Workers
  Lawyers
  Physicians &/or Surgeons

MAINTENANCE & PRODUCTION WORKERS

All Other Mechanics & Repairers
  Protective-Signal Installers &/or Repairers
  Camera Repairers
  Farm Equipment Mechanics
  Laundry Machine Mechanics
  Locksmiths
  Mechanics, Sewing Machine
  Elevator Installers &/or Repairers

All Other Skilled Craft Workers
  Shoe Repairers
  Furnace Installers & Repairers, Hot Air
  Custom Sewers (Excl. Alteration)
  Custom Tailors
  Cake Decorators

MAINTENANCE & PRODUCTION WORKERS (CONTD.)

All Other Operatives & Semiskilled Workers
  Doughnut Makers &/or Doughnut Machine Opers.
  Variety Saw Operators
  Truck Driver Helpers
  Woodworking Machine Operators

All Other Laborers & Unskilled Workers
  Oilers
  Painters, Maintenance (Excl.Production Painters)

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

MOHAVE COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	411	450	39	58	97
Managers, Merchandise	16	18	2	2	4
Managers, Store	234	251	17	33	50
Managers, Automobile Service Department	20	20	0	3	3
Managers, Automotive Parts Department	24	25	1	3	4
Wholesalers	22	25	3	3	6
Managers, Restaurant, Coffee Shop or Liquor Estab.	70	84	14	11	25
All Other Managers	25	27	2	3	5
TOTAL PROFESSIONAL WORKERS	55	62	7	9	16
Buyers, Retail &/or Wholesale Trade	13	14	1	2	3
Accountants & Auditors	5	5	0	1	1
Pharmacists	19	22	3	4	7
All Other Professional Workers	18	21	3	2	5
TOTAL TECHNICAL WORKERS	1	1	0	0	0
TOTAL SERVICE WORKERS	1,302	1,555	253	238	491
Janitors, Porters & Cleaners	29	33	4	5	9
Bartenders	39	47	8	6	14
Dining Room/Cafeteria Attends. & Bartender Helpers	62	75	13	4	17
Butchers &/or Meat Cutters	42	45	3	4	7
Hosts/Hostesses, Restaurant, Lounge or Coffee Shop	19	23	4	4	8
Kitchen Helpers	116	139	23	22	45
Waiters or Waitresses	307	367	60	70	130
Cooks, Short Order &/or Specialty Fast Foods	58	69	11	9	20
Cooks, Restaurant (Excl. Supervisory Chefs)	93	111	18	15	33
Food Preparation & Service Workers, Fast Food Restaurant	519	625	106	96	202
All Other Food Service Workers	17	20	3	3	6
All Other Service Workers	1	1	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	842	908	66	71	137
Mechanics, Automotive	98	102	4	8	12
Body Repairers, Automotive	11	11	0	1	1
Motorboat Mechanics	11	11	0	1	1
All Other Mechanics & Repairers	81	88	7	6	13
Truck Drivers	35	39	4	3	7
Cleaners, Vehicle	25	26	1	1	2
Delivery & Route Workers	81	93	12	6	18
Supervisors, Nonworking	10	11	1	1	2
Glaziers	5	6	1	0	1
Production Packagers, Hand or Machine	15	17	2	2	4
Baggers	57	61	4	4	8
Fuel Pump Attendants &/or Lubricators	143	151	8	16	24
Tire Changers	14	14	0	2	2
Stock Clerks, Sales Floor	158	170	12	10	22
Mobile Home Set-Up Operators	6	7	1	1	2
All Other Skilled Craft Workers	45	49	4	4	8
All Other Operatives & Semiskilled Workers	19	21	2	2	4
All Other Laborers & Unskilled Workers	28	31	3	3	6
TOTAL CLERICAL WORKERS	585	637	52	113	165
All Office Machine Operators	4	4	0	1	1
Accounting Clerks	21	24	3	4	7
Bookkeepers, Hand	41	45	4	8	12
Cashiers (Include Cashier-Checkers)	303	329	26	62	88
General Clerks, Office	87	94	7	19	26
Order Clerks	19	21	2	4	6
Secretaries	16	18	2	4	6

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

MOHAVE COUNTY (CONTD.)

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
All Other Office Clerical Workers	13	14	1	2	3
Shipping &/or Receiving Clerks	9	10	1	1	2
Stock Clerks, Stockroom, Warehouse or Storage	70	76	6	8	14
All Other Plant Clerical Workers	2	2	0	0	0
TOTAL SALES WORKERS	749	815	66	96	162
Sales Representatives, Agents &/or Associates	256	277	21	33	54
Sales Clerks (Excl. Cashiers)	493	538	45	63	108
TOTAL ALL OCCUPATIONS	3,945	4,428	483	585	1,068

Confidential data for certain occupations, and data for occupations with employment of less than five, have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

MANAGERS & OFFICERS

- All Other Managers
  - Directors, Food & Beverage &/or Managers, Catering

PROFESSIONAL WORKERS

- All Other Professional Workers
  - Musicians, Instrumental
  - Designers (Excl. Design Engineers)

SERVICE WORKERS

- All Other Food Service Workers
  - Counter Attends., Lunch, Coffee Shop or Cafeteria
  - Pantry, Sandwich &/or Coffee Makers
  - Cooks, Institution

MAINTENANCE & PRODUCTION WORKERS

- All Other Mechanics & Repairers
  - Diesel Mechanics (Excl. Auto & Eng. Equip.)
  - Engineering Equipment Mechanics
  - Laundry Machine Mechanics
  - Marine Mechanics &/or Repairers
  - Office Machine &/or Cash Register Servicers
  - TV Servicers & Repairers, Radio &/or Tape Recorder Repairers
  - Coin-Machine Servicers &/or Vending Machine Repairers
  - Gas & Electric Appliance Repairers

- All Other Skilled Craft Workers
  - Cabinetmakers (Excl. Carpenters)
  - Carpenters (Excl. Cabinetmakers)
  - Jewelers &/or Silversmiths
  - Machinists
  - Maintenance Repairers, General Utility
  - Painters, Automotive

MAINTENANCE & PRODUCTION WORKERS (CONTD.)

  - Watchmakers
  - Household Appliance Installers
  - Bakers
  - Ceiling Tile Installers &/or Floor Layers

- All Other Operatives & Semiskilled Workers
  - Carpet Cutters &/or Layers
  - Industrial Truck Operators
  - Sewing Machine Opers., Regular Equip.-Garment
  - Tire Fabricators &/or Repairers

- All Other Laborers & Unskilled Workers
  - Helpers, Trades
  - Mobile Home Repairers

CLERICAL WORKERS

- All Office Machine Operators
  - Bookkeeping &/or Billing Machine Operators

- All Other Office Clerical Workers
  - Adjustment Clerks
  - Payroll &/or Timekeeping Clerks
  - Receptionists
  - Service Clerks
  - Switchboard Operators/Receptionists
  - Typists

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

NAVAJO COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	371	409	38	54	92
Managers, Store	205	220	15	29	44
Managers, Automobile Service Department	12	12	0	2	2
Managers, Automotive Parts Department	12	12	0	2	2
Wholesalers	9	10	1	1	2
Managers, Restaurant, Coffee Shop or Liquor Estab.	72	87	15	11	26
All Other Managers	61	68	7	9	16
TOTAL PROFESSIONAL WORKERS	34	38	4	6	10
Buyers, Retail &/or Wholesale Trade	16	18	2	2	4
Accountants & Auditors	5	5	0	1	1
Pharmacists	12	14	2	3	5
All Other Professional Workers	1	1	0	0	0
TOTAL SERVICE WORKERS	1,107	1,317	210	207	417
Janitors, Porters & Cleaners	35	40	5	6	11
All Other Guards & Doorkeepers	2	2	0	0	0
Bartenders	53	64	11	8	19
Dining Room/Cafeteria Attends. & Bartender Helpers	27	33	6	2	8
Butchers &/or Meat Cutters	38	41	3	4	7
Kitchen Helpers	120	144	24	22	46
Waiters or Waitresses	294	352	58	67	125
Counter Attends., Lunch, Coffee Shop or Cafeteria	56	67	11	13	24
Cooks, Short Order &/or Specialty Fast Foods	97	116	19	15	34
Cooks, Restaurant (Excl. Supervisory Chefs)	109	131	22	17	39
Food Preparation & Service Workers, Fast Food Restaurant	240	288	48	45	93
All Other Food Service Workers	11	13	2	3	5
All Other Service Workers	25	26	1	5	6
TOTAL MAINTENANCE & PRODUCTION WORKERS	632	669	37	55	92
Mechanics, Automotive	69	71	2	6	8
All Other Mechanics & Repairers	24	26	2	2	4
Truck Drivers	22	24	2	2	4
Cleaners, Vehicle	22	23	1	1	2
Delivery & Route Workers	27	31	4	2	6
Baggers	48	52	4	3	7
Fuel Pump Attendants &/or Lubricators	189	196	7	21	28
Tire Changers	12	12	0	1	1
Stock Clerks, Sales Floor	134	144	10	8	18
All Other Skilled Craft Workers	30	31	1	2	3
All Other Operatives & Semiskilled Workers	31	33	2	3	5
All Other Laborers & Unskilled Workers	24	26	2	4	6
TOTAL CLERICAL WORKERS	476	519	43	90	133
All Office Machine Operators	1	1	0	0	0
Accounting Clerks	15	16	1	3	4
Bookkeepers, Hand	52	57	5	10	15
Cashiers (Include Cashier-Checkers)	271	293	22	56	78
General Clerks, Office	43	47	4	9	13
Order Clerks	17	19	2	4	6
Secretaries	5	5	0	1	1
Shipping Packers	10	12	2	1	3
Shipping &/or Receiving Clerks	20	23	3	2	5
Stock Clerks, Stockroom, Warehouse or Storage	39	43	4	4	8
All Other Office Clerical Workers	2	2	0	0	0
All Other Plant Clerical Workers	1	1	0	0	0
TOTAL SALES WORKERS	578	629	51	74	125
Sales Representatives, Agents &/or Associates	141	152	11	18	29

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

NAVAJO COUNTY (CONTD.)

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Sales Clerks (Excl. Cashiers)	437	477	40	56	96
TOTAL ALL OCCUPATIONS	3,198	3,581	383	486	869

Confidential data for certain occupations, and data for occupations with employment of less than five, have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

MANAGERS & OFFICERS

- All Other Managers
  - Directors, Food & Beverage &/or Managers, Catering
  - Managers, Merchandise

SERVICE WORKERS

- All Other Food Service Workers
  - Bakers, Breads &/or Pastry
  - Hosts/Hostesses, Restaurant, Lounge or Coffee Shop
  - Pantry, Sandwich &/or Coffee Makers

MAINTENANCE & PRODUCTION WORKERS

- All Other Mechanics & Repairers
  - Body Repairers, Automotive
  - Diesel Mechanics (Excl. Auto & Eng. Equip.)
  - Engineering Equipment Mechanics
  - Laundry Machine Mechanics
  - Office Machine &/or Cash Register Servicers
  - Gas & Electric Appliance Repairers

MAINTENANCE & PRODUCTION WORKERS (CONTD.)

- All Other Skilled Craft Workers
  - Supervisors, Nonworking
  - Alteration Tailors
  - Watchmakers
  - Maintenance Repairers, General Utility
  - Bakers
  - Wood Machinists

- All Other Operatives & Semiskilled Workers
  - Carpet Cutters &/or Layers
  - Industrial Truck Operators
  - Tire Fabricators &/or Repairers
  - Marine Service Station Attendants

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

PIMA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-198
TOTAL MANAGERS & OFFICERS	4,704	5,414	710	684	1,394
Directors, Food & Beverage &/or Managers, Catering	31	37	6	5	11
Managers, Merchandise	277	327	50	30	80
Managers, Store	2,350	2,668	318	340	658
Managers, Automobile Service Department	111	114	3	16	19
Managers, Automotive Parts Department	90	93	3	13	16
Wholesalers	318	388	70	47	117
Managers, Restaurant, Coffee Shop or Liquor Estab.	803	969	166	128	294
All Other Managers	724	818	94	105	199
TOTAL PROFESSIONAL WORKERS	1,054	1,217	163	157	320
Mechanical Engineers	9	10	1	1	2
All Other Engineers	13	16	3	0	3
Systems Analysts, Electronic Data Processing	32	38	6	1	7
Purchasing Agents &/or Buyers	11	13	2	1	3
Buyers, Retail &/or Wholesale Trade	304	339	35	46	81
Accountants & Auditors	77	88	11	12	23
Commercial Artists	14	16	2	3	5
Musicians, Instrumental	110	133	23	17	40
Personnel & Labor Relations Specialists	32	34	2	4	6
Pharmacists	202	237	35	45	80
Designers (Excl. Design Engineers)	149	176	27	13	40
All Other Professional Workers	101	117	16	14	30
TOTAL TECHNICAL WORKERS	209	248	39	20	59
Computer Programmers	33	39	6	2	8
Drafters	8	10	2	1	3
Electrical & Electronic Technicians	91	111	20	5	25
Pharmacy Helpers	30	34	4	7	11
All Other Technicians	47	54	7	5	12
TOTAL SERVICE WORKERS	12,156	14,583	2,427	2,235	4,662
Janitors, Porters & Cleaners	525	603	78	97	175
Guards & Doorkeepers	45	51	6	3	9
Bakers, Bread &/or Pastry	140	168	28	24	52
Bartenders	529	639	110	79	189
Dining Room/Cafeteria Attends. & Bartender Helpers	621	749	128	36	164
Butchers &/or Meat Cutters	234	277	43	25	68
Hosts/Hostesses, Restaurant, Lounge or Coffee Shop	321	386	65	73	138
Kitchen Helpers	1,137	1,366	229	211	440
Waiters or Waitresses	3,076	3,705	629	700	1,329
Counter Attends., Lunch, Coffee Shop or Cafeteria	319	377	58	75	133
Cooks, Short Order &/or Specialty Fast Foods	598	718	120	95	215
Cooks, Restaurant (Excl. Supervisory Chefs)	1,063	1,283	220	168	388
Food Preparation & Service Workers, Fast Food Restaurant	3,111	3,755	644	579	1,223
Pantry, Sandwich &/or Coffee Makers	151	182	31	28	59
Cooks, Institution	27	31	4	4	8
All Other Food Service Workers	26	31	5	5	10
Cosmetologists &/or Women's Hairstylists	26	26	0	7	7
Supervisors, Nonworking - Service	87	104	17	10	27
Checkers, Fitting Room	22	22	0	2	2
Store Detectives	40	41	1	2	3
All Other Service Workers	58	69	11	12	23
TOTAL MAINTENANCE & PRODUCTION WORKERS	7,285	8,306	1,021	652	1,673
Mechanics, Automotive	758	796	38	62	100
Body Repairers, Automotive	113	117	4	9	13

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

PIMA COUNTY (CONTD.)

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Bicycle Repairers	22	26	4	2	6
Diesel Mechanics (Excl. Auto & Eng. Equip.)	61	71	10	5	15
Engineering Equipment Mechanics	50	61	11	4	15
Office Machine &/or Cash Register Servicers	165	201	36	16	52
Refrigeration/Air Conditioning Mechanics	23	24	1	2	3
TV Servicers & Repairers, Radio &/or Tape Recorder Repairers	73	84	11	5	16
Data Processing Machine Repairers	34	41	7	2	9
Gas & Electric Appliance Repairers	33	36	3	4	7
All Other Mechanics & Repairers	58	62	4	3	7
Truck Drivers	225	265	40	17	57
Automobile Repair/Service Estimators	26	27	1	2	3
Cabinetmakers (Excl. Carpenters)	49	58	9	4	13
Carpet Cutters &/or Layers	18	22	4	1	5
Carpenters (Excl. Cabinetmakers)	27	32	5	4	9
Cleaners, Vehicle	133	138	5	7	12
Crane, Derrick & Hoist Operators	5	6	1	0	1
Delivery & Route Workers	887	1,057	170	63	233
Merchandise Displayers & Window Trimmers	24	25	1	5	6
Supervisors, Nonworking	179	206	27	20	47
Industrial Truck Operators	70	84	14	5	19
Jewelers &/or Silversmiths	30	36	6	6	12
Machinists	27	30	3	3	6
Maintenance Repairers, General Utility	171	200	29	16	45
Helpers, Trades	93	97	4	10	14
Musical Instrument Repairers	6	7	1	1	2
Order Fillers	176	213	37	11	48
Painters, Automotive	41	43	2	5	7
Production Packagers, Hand or Machine	185	218	33	30	63
Sewing Machine Opers., Special Equip. &/or Auto Equip. Non-Garment	38	45	7	5	12
Alteration Tailors	67	68	1	11	12
Tire Fabricators &/or Repairers	29	32	3	3	6
Watchmakers	9	11	2	1	3
Welders & Flamecutters	14	17	3	2	5
Furniture Assemblers & Installers	16	19	3	2	5
Baggers	387	458	71	25	96
Fuel Pump Attendants &/or Lubricators	535	560	25	60	85
Tire Changers	130	136	6	15	21
Opticians, Dispensing &/or Optical Mechanics	14	17	3	2	5
Drapery Hangers	7	8	1	1	2
Household Appliance Installers	16	17	1	2	3
Stock Clerks, Sales Floor	1,235	1,438	203	79	282
Furniture Finishers	18	21	3	1	4
Furniture Upholsterers	15	16	1	2	3
Bakers	47	56	9	8	17
Cake Decorators	8	9	1	1	2
Wood Machinists	33	39	6	4	10
Ceiling Tile Installers &/or Floor Layers	25	30	5	1	6
Mobile Home Repairers	40	43	3	4	7
Mobile Home Set-Up Operators	27	32	5	3	8
All Other Skilled Craft Workers	128	146	18	17	35
All Other Operatives & Semiskilled Workers	278	331	53	32	85
All Other Laborers & Unskilled Workers	407	474	67	47	114
TOTAL CLERICAL WORKERS	6,467	7,421	954	1,239	2,193
Bookkeeping &/or Billing Machine Operators	105	124	19	20	39
Computer Operators	34	39	5	4	9
Keypunch Operators	47	56	9	10	19
Peripheral EDP Equipment Operators	10	10	0	2	2
All Other Office Machine Operators	11	13	2	3	5
Accounting Clerks	407	465	58	81	139
Bookkeepers, Hand	522	607	85	105	190

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

PIMA COUNTY (CONTD.)

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Adjustment Clerks	69	72	3	15	18
Cashiers (Include Cashier-Checkers)	2,229	2,564	335	465	800
Collectors	19	20	1	3	4
General Clerks, Office	825	946	121	181	302
Credit Authorizers	26	26	0	6	6
Order Clerks	195	231	36	42	78
Payroll &/or Timekeeping Clerks	25	27	2	4	6
Personnel Clerks	21	23	2	6	8
Credit Reference Clerks	8	8	0	2	2
Receptionists	26	30	4	7	11
Secretaries	243	284	41	57	98
Service Clerks	59	61	2	13	15
Switchboard Operators	19	20	1	5	6
Switchboard Operators/Receptionists	54	61	7	14	21
Typists	54	65	11	14	25
Clerical Supervisors, Office or Plant	84	97	13	10	23
All Other Office Clerical Workers	105	112	7	22	29
Shipping Packers	128	153	25	15	40
Shipping &/or Receiving Clerks	258	299	41	23	64
Stock Clerks, Stockroom, Warehouse or Storage	771	889	118	89	207
Dispatchers, Vehicle, Service or Work	28	30	2	3	5
Marking Clerks	67	71	4	14	18
All Other Plant Clerical Workers	18	18	0	4	4
TOTAL SALES WORKERS	9,834	10,977	1,143	1,333	2,476
Sales Representatives, Agents &/or Associates	4,309	4,801	492	556	1,048
Sales Clerks (Excl. Cashiers)	4,593	5,091	498	591	1,089
Sales Clerk Supervisors	718	842	124	151	275
All Other Sales Workers	214	243	29	35	64
TOTAL ALL OCCUPATIONS	41,709	48,166	6,457	6,320	12,777

Confidential data for certain occupations, and data for occupations with employment of less than five, have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL WORKERS

- All Other Engineers
  - Electrical & Electronic Engineers
- All Other Professional Workers
  - Chemists
  - Public Relations Practitioners
  - Writers &/or Editors

TECHNICAL WORKERS

- All Other Technicians
  - Mechanical Engineering Technicians

MAINTENANCE & PRODUCTION WORKERS

- All Other Mechanics & Repairers
  - Mechanics, Aircraft
  - Electric Motor Repairers
  - Farm Equipment Mechanics
  - Laundry Machine Mechanics
  - Marine Mechanics &/or Repairers
  - Mechanics, Maintenance (Excl. Millwright)
  - Coin-Machine Servicers &/or Vending Machine Repairers
  - Motorboat Mechanics
  - Mechanics, Sewing Machine

MAINTENANCE & PRODUCTION WORKERS (CONTD.)

- All Other Skilled Craft Workers
  - Shoe Repairers
  - Glaziers
  - Instrument Repairers
  - Plumbers &/or Pipefitters
  - Custom Sewers (Excl. Alteration)
  - Stationary Engineers
  - All-Around Tailors
- All Other Operatives & Semiskilled Workers
  - Sewing Machine Opers., Regular Equip.-Garment
  - Sewing Machine Opers., Regular Equip.-Non-garment
  - Drapery & Upholstery Measurers
  - Doughnut Makers &/or Doughnut Machine Opers.
  - Truck Driver Helpers
  - Picture Framers
- All Other Laborers & Unskilled Workers
  - Oilers

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

PIMA COUNTY (CONTD.)

CLERICAL WORKERS

All Other Office Clerical Workers
- File Clerks
- Procurement Clerks

All Other Plant Clerical Workers
- Weighers, Recordkeeping

SALES WORKERS

All Other Sales Workers
- Demonstrators

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

PINAL COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	367	406	39	52	91
Managers, Merchandise	27	31	4	3	7
Managers, Store	215	232	17	31	48
Managers, Automobile Service Department	17	17	0	2	2
Managers, Automotive Parts Department	10	11	1	1	2
Wholesalers	9	10	1	1	2
Managers, Restaurant, Coffee Shop or Liquor Estab.	62	75	13	10	23
All Other Managers	27	30	3	4	7
TOTAL PROFESSIONAL WORKERS	54	61	7	10	17
Accountants & Auditors	6	7	1	1	2
Musicians, Instrumental	8	10	2	1	3
Pharmacists	26	29	3	6	9
Designers (Excl. Design Engineers)	9	10	1	1	2
All Engineers	1	1	0	0	0
All Other Professional Workers	4	4	0	1	1
TOTAL TECHNICAL WORKERS	5	5	0	1	1
All Engineering Technicians	2	2	0	0	0
All Medical & Dental Technicians	3	3	0	1	1
TOTAL SERVICE WORKERS	1,002	1,182	180	188	368
Janitors, Porters & Cleaners	39	43	4	7	11
Bartenders	58	69	11	9	20
Dining Room & Cafeteria Attends. & Bartender Helpers	28	34	6	2	8
Butchers &/or Meat Cutters	25	27	2	3	5
Kitchen Helpers	91	106	15	17	32
Waiters or Waitresses	277	329	52	63	115
Counter Attends., Lunch, Coffee Shop or Cafeteria	78	91	13	18	31
Cooks, Short Order &/or Specialty Fast Foods	89	106	17	14	31
Cooks, Restaurant (Excl. Supervisory Chefs)	73	86	13	11	24
Food Preparation & Service Workers, Fast Food Restaurant	222	267	45	41	86
All Other Food Service Workers	20	22	2	3	5
All Other Service Workers	2	2	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	788	859	71	69	140
Mechanics, Automotive	77	79	2	6	8
Body Repairers, Automotive	13	13	0	1	1
Diesel Mechanics (Excl. Auto & Eng. Equip.)	32	37	5	3	8
Farm Equipment Mechanics	8	9	1	1	2
Engineering Equipment Mechanics	22	25	3	2	5
All Other Mechanics & Repairers	7	7	0	0	0
Truck Drivers	18	20	2	1	3
Cleaners, Vehicle	12	12	0	1	1
Delivery & Route Workers	42	48	6	3	9
Supervisors, Nonworking	20	23	3	2	5
Machinists	5	5	0	1	1
Maintenance Repairers, General Utility	16	18	2	1	3
Helpers, Trades	10	11	1	1	2
Production Packagers, Hand or Machine	7	8	1	1	2
Tire Fabricators &/or Repairers	6	6	0	1	1
Welders & Flamecutters	8	9	1	1	2
Baggers	40	43	3	2	5
Fuel Pump Attendants &/or Lubricators	110	114	4	12	16
Tire Changers	19	19	0	2	2
Stock Clerks, Sales Floor	119	128	9	7	16
Mobile Home Set-Up Operators	7	8	1	1	2
All Other Skilled Craft Workers	13	14	1	0	1
All Other Operatives & Semiskilled Workers	26	29	3	2	5

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

PINAL COUNTY (CONTD.)

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
All Other Laborers & Unskilled Workers	151	174	23	17	40
TOTAL CLERICAL WORKERS	691	748	57	133	190
Bookkeeping &/or Billing Machine Operators	5	6	1	1	2
Accounting Clerks	30	32	2	6	8
Bookkeepers, Hand	37	40	3	7	10
Cashiers (Include Cashier-Checkers)	428	461	33	88	121
General Clerks, Office	53	59	6	11	17
Order Clerks	8	9	1	2	3
Secretaries	16	17	1	4	5
Service Clerks	17	17	0	4	4
Clerical Supervisors, Office or Plant	8	9	1	1	2
All Other Office Clerical Workers	6	6	0	1	1
Shipping &/or Receiving Clerks	16	18	2	1	3
Weighers, Record Keeping	21	24	3	2	5
Stock Clerks, Stockroom, Warehouse or Storage	46	50	4	5	9
TOTAL SALES WORKERS	640	695	55	82	137
Sales Representatives, Agents &/or Associates	187	203	16	24	40
Sales Clerks (Excl. Cashiers)	453	492	39	58	97
TOTAL ALL OCCUPATIONS	3,547	3,956	409	535	944

Confidential data for certain occupations, and data for occupations with employment of less than five, have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL WORKERS

All Other Professional Workers
- Buyers, Retail &/or Wholesale Trade

SERVICE WORKERS

All Other Food Service Workers
- Bakers, Bread &/or Pastry
- Hosts/Hostesses Restaurant, Lounge or Coffee Shop
- Pantry, Sandwich &/or Coffee Makers
- Cooks, Institution

MANINTENANCE & PRODUCTION WORKERS

All Other Mechanics & Repairers
- Laundry Machine Mechanics
- TV Servicers & Repairers, Radio &/or Tape Recorder Repairers
- Gas & Electric Appliance Repairers

MAINTENANCE & PRODUCTION WORKERS (CONTD.)

All Other Skilled Craft Workers
- Electricians
- Painters, Automobile
- Watchmakers
- Household Appliance Installers
- Ceiling Tile Installers &/or Floor Layers

All Other Operatives & Semiskilled Workers
- Carpet Cutters &/or Layers
- Industrial Truck Operators
- Sewing Machine Opers., Special &/or Automatic Equip. - Nongarment
- Furniture Assemblers & Installers

All Other Laborers & Unskilled Workers
- Order Fillers
- Mobile Home Repairers

CLERICAL WORKERS

All Other Office Clerical Workers
- Adjustment Clerks
- Payroll &/or Timekeeping Clerks

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

SANTA CRUZ COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	315	352	37	45	82
Managers, Merchandise	23	26	3	2	5
Managers, Store	160	174	14	23	37
Managers, Automobile Service Department	7	7	0	1	1
Wholesalers	55	64	9	8	17
Managers, Restaurant, Coffee Shop or Liquor Estab.	41	49	8	7	15
All Other Managers	29	32	3	4	7
TOTAL PROFESSIONAL WORKERS	80	88	8	12	20
Buyers, Retail &/or Wholesale Trade	44	49	5	7	12
Accountants & Auditors	15	17	2	2	4
Pharmacists	10	11	1	2	3
All Other Professional Workers	11	11	0	1	1
TOTAL TECHNICAL WORKERS	6	7	1	0	1
TOTAL SERVICE WORKERS	483	564	81	83	164
Janitors, Porters & Cleaners	53	58	5	10	15
All Guards & Doorkeepers	3	3	0	0	0
Bartenders	17	20	3	3	6
Dining Room/Cafeteria Attends. & Bartender Helpers	9	11	2	1	3
Butchers &/or Meat Cutters	20	22	2	2	4
Kitchen Helpers	31	37	6	6	12
Waiters or Waitresses	66	78	12	15	27
Counter Attends., Lunch, Coffee Shop or Cafeteria	20	24	4	5	9
Cooks, Short Order &/or Specialty Fast Foods	98	117	19	15	34
Cooks, Restaurant (Excl. Supervisory Chefs)	31	37	6	5	11
Food Preparation & Service Workers, Fast Food Restaurant	96	115	19	18	37
All Other Food Service Workers	7	8	1	1	2
All Other Service Workers	32	34	2	2	4
TOTAL MAINTENANCE & PRODUCTION WORKERS	473	522	49	37	86
Mechanics, Automotive	26	27	1	2	3
TV Servicers & Repairers, Radio &/or Tape Recorder Repairers	5	6	1	0	1
All Other Mechanics & Repairers	17	19	2	1	3
Truck Drivers	13	15	2	1	3
Delivery & Route Workers	74	85	11	5	16
Supervisors, Nonworking	13	15	2	1	3
Industrial Truck Operators	35	41	6	3	9
Maintenance Repairers, General Utility	11	12	1	1	2
Order Fillers	22	25	3	1	4
Baggers	34	36	2	2	4
Fuel Pump Attendants &/or Lubricators	16	16	0	2	2
Stock Clerks, Sales Floor	123	132	9	8	17
All Other Skilled Craft Workers	14	14	0	3	3
All Other Operatives & Semiskilled Workers	13	14	1	1	2
All Other Laborers & Unskilled Workers	57	65	8	6	14
TOTAL CLERICAL WORKERS	802	893	91	146	237
Bookkeeping &/or Billing Machine Operators	20	23	3	4	7
All Other Office Machine Operators	2	2	0	0	0
Accounting Clerks	33	37	4	7	11
Bookkeepers, Hand	55	63	8	11	19
Cashiers (Include Cashier-Checkers)	210	229	19	43	62
General Clerks, Office	105	117	12	23	35
Order Clerks	13	15	2	3	5
Secretaries	40	45	5	9	14
Typists	8	9	1	2	3

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

SANTA CRUZ COUNTY (CONTD.)

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Clerical Supervisors, Office or Plant	12	14	2	1	3
All Other Office Clerical Workers	26	27	1	6	7
Shipping Packers	76	88	12	9	21
Shipping &/or Receiving Clerks	30	34	4	3	7
Stock Clerks, Stockroom, Warehouse or Storage	113	127	14	13	27
Marking Clerks	57	61	4	12	16
All Other Plant Clerical Workers	2	2	0	0	0
TOTAL SALES WORKERS	761	828	67	99	166
Sales Representatives, Agents &/or Associates	144	162	18	19	37
Sales Clerks (Excl. Cashiers)	597	645	48	76	124
Sales Clerk Supervisors	20	21	1	4	5
TOTAL ALL OCCUPATIONS	2,920	3,254	334	422	756

Confidential data for certain occupations, and data for occupations with employment of less than five, have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

MANAGERS & OFFICERS

- All Other Managers
  - Managers, Automotive Parts Department

PROFESSIONAL WORKERS

- All Other Professional Workers
  - Commerical Artists
  - Musicians, Instrumental

TECHNICAL WORKERS

- Computer Programmers
- Electrical & Electronic Technicians

SERVICE WORKERS

- All Other Food Service Workers
  - Bakers, Bread &/or Pastry
  - Hosts/Hostesses, Restaurant, Lounge or Coffee Shop
  - Pantry, Sandwich &/or Coffee Makers
  - Cooks, Institution

- All Other Service Workers
  - Supervisors, Nonworking - Service
  - Store Detectives

MAINTENANCE & PRODUCTION WORKERS

- All Other Mechanics & Repairers
  - Diesel Mechanics (Excl. Auto & Eng. Equip.)
  - Engineering Equipment Mechanic
  - Refrigeration/Air Conditioning Mechanics
  - Gas & Electric Appliance Repairers

- All Other Skilled Craft Workers
  - Carpenters (Excl. Cabinetmaker)
  - Merchandise Displayers
  - Custom Sewers (Excl. Alteration)
  - Alteration Tailors

- All Other Operatives & Semiskilled Workers
  - Carpet Cutters &/or Layers
  - Sewing Machine Opers., Special &/or Automatic Equip.-Nongarment
  - Tire Changers
  - Mobile Home Set-Up Operators

- All Other Laborers & Unskilled Workers
  - Cleaners, Vehicle
  - Helpers, Trades
  - Production Packagers, Hand or Machine
  - Mobile Home Repairers

CLERICAL WORKERS

- All Other Office Clerical Workers
  - Adjustment Clerks
  - Collectors
  - Credit Authorizers
  - Payroll &/or Timekeeping Clerk
  - Receptionists
  - Switchboard Operators/Receptionists

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

YAVAPAI COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	450	501	51	65	116
Directors, Food & Beverage &/or Managers, Catering	10	12	2	2	4
Managers, Merchandise	33	38	5	4	9
Managers, Store	247	268	21	35	56
Managers, Automobile Service Department	13	13	0	2	2
Managers, Automotive Parts Department	9	9	0	1	1
Wholesalers	14	16	2	2	4
Managers, Restaurant	89	107	18	14	32
All Other Managers	35	38	3	5	8
TOTAL PROFESSIONAL WORKERS	68	77	9	10	19
Buyers, Retail &/or Wholesale Trade	11	12	1	2	3
Pharmacists	23	26	3	5	8
Designers (Excl. Design Engineers)	22	25	3	2	5
All Other Professional Workers	12	14	2	1	3
TOTAL TECHNICAL WORKERS	1	1	0	0	0
TOTAL SERVICE WORKERS	1,527	1,819	292	282	574
Janitors, Porters & Cleaners	52	59	7	10	17
Bakers, Bread &/or Pastry	22	25	3	4	7
Bartenders	64	76	12	10	22
Dining Room & Cafeteria Attends. & Bartender Helpers	91	110	19	5	24
Butchers &/or Meat Cutters	46	50	4	5	9
Hosts/Hostesses, Restaurant, Lounge or Coffee Shop	25	30	5	6	11
Kitchen Helpers	198	237	39	37	76
Waiters or Waitresses	472	566	94	107	201
Counter Attends., Lunch, Coffee Shop or Cafeteria	50	59	9	12	21
Cooks, Short Order &/or Specialty Fast Foods	110	132	22	17	39
Cooks, Restaurant (Excl. Supervisory Chefs)	145	173	28	23	51
Food Preparation & Service Workers, Fast Food Restaurant	228	273	45	42	87
Pantry, Sandwich &/or Coffee Makers	18	22	4	3	7
All Other Food Service Workers	1	1	0	0	0
Supervisors, Nonworking-Service	5	6	1	1	2
TOTAL MAINTENANCE & PRODUCTION WORKERS	824	897	73	65	138
Mechanics, Automotive	84	86	2	7	9
Body Repairers, Automotive	12	12	0	1	1
TV Servicers & Repairers, Radio &/or Tape Recorder Repairers	12	14	2	1	3
Gas & Electric Appliance Repairers	9	10	1	1	2
All Other Mechanics & Repairers	23	26	3	1	4
Truck Drivers	29	33	4	2	6
Cabinetmakers (Excl. Carpenters)	44	50	6	4	10
Carpet Cutters &/or Layers	12	14	2	1	3
Cleaners, Vehicle	9	9	0	0	0
Delivery & Route Workers	78	89	11	5	16
Maintenance Repairers, General Utility	11	13	2	1	3
Helpers, Trades	12	13	1	1	2
Order Fillers	5	5	0	0	0
Baggers	69	74	5	4	9
Fuel Pump Attendants &/or Lubricators	92	96	4	10	14
Tire Changers	19	19	0	2	2
Stock Clerks, Sales Floor	184	198	14	11	25
All Other Skilled Craft Workers	40	45	5	5	10
All Other Operatives & Semiskilled Workers	42	49	7	4	11
All Other Laborers & Unskilled Workers	38	42	4	4	8

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

YAVAPAI COUNTY (CONTD.)

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL CLERICAL WORKERS	575	631	56	113	169
All Office Machine Operators	6	7	1	1	2
Accounting Clerks	34	37	3	7	10
Bookkeepers, Hand	71	79	8	14	22
Cashiers (Include Cashier-Checkers)	289	316	27	59	86
General Clerks, Office	56	62	6	12	18
Order Clerks	12	13	1	3	4
Secretaries	16	18	2	4	6
Clerical Supervisors, Office or Plant	7	8	1	1	2
All Other Office Clerical Workers	20	21	1	4	5
Shipping &/or Receiving Clerks	20	22	2	2	4
Stock Clerks, Stockroom, Warehouse or Storage	41	45	4	5	9
All Other Plant Clerical Workers	3	3	0	1	1
TOTAL SALES WORKERS	758	833	75	97	172
Sales Representatives, Agents &/or Associates	250	272	22	32	54
Sales Clerks (Excl. Cashiers)	508	561	53	65	118
TOTAL ALL OCCUPATIONS	4,203	4,759	556	632	1,188

Confidential data for certain occupations, and data for occupations with employment of less than five, have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL WORKERS

- All Other Professional Workers
  - Accountants and Auditors
  - Musicians, Instrumental

MAINTENANCE & PRODUCTION WORKERS

- All Other Mechanics & Repairers
  - Laundry Machine Mechanics
  - Mechanics, Maintenance
  - Office Machine &/or Cash Register Servicers

- All Other Skilled Craft Workers
  - Automobile Repair/Service Estimators
  - Carpenters (Excl. Cabinetmakers)
  - Glaziers
  - Jewelers &/or Silversmiths
  - Opticians, Dispensing &/or Optical Mechanics
  - Bakers
  - Wood Machinists
  - Alteration Tailors
  - Watchmakers

MAINTENANCE & PRODUCTION WORKERS (CONTD.)

- All Other Operatives & Semiskilled Workers
  - Heavy Equipment Operators
  - Industrial Truck Operators
  - Mobile Home Set-Up Operators
  - Furniture Assemblers & Installers

- All Other Laborers & Unskilled Workers
  - Production Packagers, Hand or Machine
  - Mobile Home Repairers

CLERICAL WORKERS

- All Office Machine Operators
  - Bookkeeping &/or Billing Machine Operators

- All Other Office Clerical Workers
  - Adjustment Clerks
  - Payroll &/or Timekeeping Clerks
  - Personnel Clerks
  - Receptionists
  - Service Clerks
  - Switchboard Operators
  - Switchboard Operators/Receptionists
  - Typists

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

YUMA COUNTY

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
TOTAL MANAGERS & OFFICERS	691	769	78	99	177
Managers, Merchandise	78	89	11	8	19
Managers, Store	340	368	28	49	77
Managers, Automobile Service Department	27	28	1	4	5
Managers, Automotive Parts Department	18	19	1	3	4
Wholesalers	49	57	8	7	15
Managers, Restaurant, Coffee Shop or Liquor Estab.	92	110	18	15	33
All Other Managers	87	98	11	13	24
TOTAL PROFESSIONAL WORKERS	73	80	7	10	17
Buyers, Retail &/or Wholesale Trade	15	16	1	2	3
Accountants & Auditors	14	15	1	2	3
Pharmacists	23	26	3	5	8
Designers (Excl. Design Engineers)	11	13	2	1	3
All Other Professional Workers	10	10	0	0	0
TOTAL TECHNICAL WORKERS	41	47	6	2	8
Electrical & Electronic Technicians	29	34	5	2	7
All Other Engineering Technicians	5	5	0	0	0
All Other Technicians	7	8	1	0	1
TOTAL SERVICE WORKERS	1,718	2,034	316	317	633
Janitors, Porters & Cleaners	86	97	11	16	27
Guards & Doorkeepers	7	8	1	0	1
Bakers, Bread &/or Pastry	15	18	3	3	6
Bartenders	80	96	16	12	28
Dining Room/Cafeteria Attends. & Bartender Helpers	49	59	10	3	13
Butchers &/or Meat Cutters	52	56	4	5	9
Hosts/Hostesses, Restaurant, Lounge or Coffee Shop	25	30	5	6	11
Kitchen Helpers	169	201	32	31	63
Waiters or Waitresses	383	457	74	87	161
Counter Attends., Lunch, Coffee Shop or Cafeteria	99	118	19	23	42
Cooks, Short Order &/or Specialty Fast Foods	189	223	34	30	64
Cooks, Restaurant (Excl. Supervisory Chefs)	135	162	27	21	48
Food Preparation & Service Workers, Fast Food Restaurant	382	459	77	71	148
All Other Food Service Workers	1	1	0	0	0
Cosmetologists &/or Women's Hairstylists	11	12	1	3	4
All Other Service Workers	35	37	2	6	8
TOTAL MAINTENANCE & PRODUCTION WORKERS	1,443	1,582	139	125	264
Mechanics, Automotive	160	169	9	13	22
Body Repairers, Automotive	15	15	0	1	1
Diesel Mechanics (Excl. Auto & Eng. Equip.)	39	45	6	3	9
Farm Equipment Mechanics	16	19	3	1	4
Office Machine &/or Cash Register Servicers	11	13	2	1	3
Gas & Electric Appliance Repairers	21	24	3	2	5
All Other Mechanics & Repairers	19	20	1	1	2
Truck Drivers	41	45	4	3	7
Cabinetmakers (Excl. Carpenters)	12	14	2	1	3
Cleaners, Vehicle	15	15	0	1	1
Delivery & Route Workers	141	163	22	10	32
Supervisors, Nonworking	36	41	5	4	9
Industrial Truck Operators	33	38	5	2	7
Jewelers &/or Silversmiths	10	11	1	2	3
Maintenance Repairers, General Utility	34	39	5	3	8
Helpers, Trades	6	6	0	1	1
Order Fillers	16	18	2	1	3
Production Packagers, Hand or Machine	10	11	1	2	3

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

YUMA COUNTY (CONTD.)

	Estimated 1982 Employment	Projected 1986 Employment	Job Openings Due to Growth 1982-1986	Job Openings Due to Separations 1982-1986	Total Job Openings 1982-1986
Baggers	130	139	9	8	17
Fuel Pump Attendants &/or Lubricators	154	159	5	17	22
Tire Changers	9	9	0	1	1
Stock Clerks, Sales Floor	237	255	18	15	33
All Other Skilled Craft Workers	55	61	6	7	13
All Other Operatives & Semiskilled Workers	130	149	19	14	33
All Other Laborers & Unskilled Workers	93	104	11	11	22
TOTAL CLERICAL WORKERS	1,039	1,146	107	193	300
Bookkeeping &/or Billing Machine Operators	11	13	2	2	4
All Other Office Machine Operators	6	7	1	0	1
Accounting Clerks	43	47	4	8	12
Bookkeepers, Hand	115	129	14	23	37
Adjustment Clerks	11	12	1	2	3
Cashiers (Include Cashier-Checkers)	466	506	40	96	136
General Clerks, Office	117	131	14	25	39
Order Clerks	6	7	1	1	2
Payroll &/or Timekeeping Clerks	5	6	1	1	2
Receptionists	3	3	0	1	1
Secretaries	19	21	2	4	6
Service Clerks	6	6	0	1	1
Clerical Supervisors, Office or Plant	12	13	1	1	2
All Other Office Clerical Workers	22	23	1	6	7
Shipping Packers	38	44	6	4	10
Shipping &/or Receiving Clerks	36	41	5	3	8
Stock Clerks, Stockroom, Warehouse or Storage	114	127	13	13	26
Marking Clerks	8	9	1	2	3
All Other Plant Clerical Workers	1	1	0	0	0
TOTAL SALES WORKERS	1,078	1,176	98	140	238
Sales Representatives, Agents &/or Associates	426	466	40	55	95
Sales Clerks	637	694	57	82	139
Sales Clerk Supervisors	8	9	1	2	3
All Other Sales Workers	7	7	0	1	1
TOTAL ALL OCCUPATIONS	6,083	6,834	751	886	1,637

Confidential data for certain occupations, and data for occupations with employment of less than five, have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL WORKERS

- All Other Professional Workers
  - Mechanical Engineers
  - Chemists
  - Systems Analysts, Electronic Data Processing
  - Purchasing Agents &/or Buyers
  - Personnel & Labor Relations Specialists

TECHINICAL WORKERS

- All Other Engineering Technicians
  - Computer Programmers
  - Drafters

- All Other Technicians
  - Science Technicians
  - Pharmacy Helpers

SERVICE WORKERS

- All Other Service Workers
  - Supervisors, Nonworking
  - Store Detectives

MAINTENANCE & PRODUCTION WORKERS

- All Other Mechanics & Repairers
  - Gasoline Engine or Mower Repairers
  - TV Servicers & Repairers, Radio &/or Tape Recorder Repairers
  - Laundry Machine Mechanics
  - Mechanics, Maintenance (Excl. Millwrights)
  - Automobile Repair Service Estimators
  - Motorboat Mechanics

- All Other Skilled Craft Workers
  - Merchandise Displayers & Window Trimmers
  - Machinists
  - Painters, Automotive
  - Stationary Engineers
  - Alteration Tailors
  - Watchmakers
  - Bakers
  - Cake Decorators
  - Carpenters
  - Household Appliance Installers
  - Wood Machinists
  - Furniture Upholsterers

ESTIMATED EMPLOYMENT AND JOB OPENINGS
TRADE

YUMA COUNTY (CONTD.)

MAINTENANCE & PRODUCTION WORKERS (CONTD.)

All Other Operatives & Semiskilled Workers
  Marine Service Station Attendants
  Doughnut Makers &/or Doughnut Machine Opers.
  Carpet Cutters &/or Layers
  Welders & Flamecutters
  Crane, Derrick & Hoist Operators

All Other Laborers & Unskilled Workers
  Tire Fabricators &/or Repairers
  Mobile Home Repairers

CLERICAL WORKERS

All Other Office Machine Operators
  Computer Operators
  Keypunch Operators

All Other Office Clerical Workers
  Collectors
  Credit Authorizers
  Personnel Clerks
  Credit Reference Clerks
  Switchboard Operators
  Switchboard Operators/Receptionists
  Typists

METHODOLOGY

Sample Selection and Response Rate

Occupational estimates for the trade industry were developed from a survey of employers in the state. Employers who were asked to participate in the survey were selected from a master employer file of firms doing business in Arizona, using standardized sampling techniques. A sample of establishments employing 4-99 employees and all establishments having 100 or more employees were surveyed. The entire sample was composed of 5,861 units with a usable response rate of 90 percent. Firms responding represented 94 percent of the industry's employment.

Employment Projections

Projecting occupational employment and demand is accomplished in two basic stages. First, industry employment estimates are developed for the target years. These forecasts are computed using an econometric model driven by forecast values for variables such as national unemployment, interest rates and industrial production. Staffing pattern ratios, as determined by the OES survey, are then applied to the industry employment projections and this represents the second stage of the methodology.

Employment data represent the annual average for the specified year. "Job Opportunities" indicates the average number of job openings (based on the annual average employment) for the period between corresponding months of the specified years. The projection technique does not possess the degree of accuracy implied by small employment and demand figures.

Job Openings

"Job Opportunities" represents the sum of openings resulting from expansion and replacement during the projection period. Expansion is the numerical difference in employment for a given period. Replacement represents those job openings that transpire due to separations from the labor force, i.e., death, retirement and pregnancy, and is based on national occupational separation rates.[1] The "Job Opportunities" column does not account for labor turnover, i.e., openings created when a worker changes jobs, leaving the job to be filled by someone else. These vacancies are generally the largest source of job openings.

Limitations of the Data

The projection methods do not account for cyclical, seasonal and such factors as the sudden opening and closing of large establishments. Caution is advised in the use of employment forecast data for industries with limited employment - especially in the smaller counties.

Employment forecasts for the nonmetropolitan counties are based on growth rates developed for the "balance of state" (Arizona less Maricopa and Pima counties) rather than for individual counties.

---

[1] "Tomorrow's Manpower Needs," Supplement No. 4, BLS, 1974, pp. 11-16.

LABOR MARKET INFORMATION PUBLICATIONS
OCCUPATIONAL EMPLOYMENT STATISTICS
BOX 6123, SITE CODE 733A
PHOENIX, ARIZONA 85005

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
EMPLOYMENT SECURITY MAIL
LAB 441

FIRST CLASS MAIL

Reproduction of this publication for commercial use is prohibited by Section 39-121 Arizona Revised Statutes. Permission to reprint this publication, or parts of it, for nonprofit use may be granted upon written request, if credit will be given citing this publication and the Arizona Department of Economic Security.

This periodical is issued and printed by the Arizona Department of Economic Security as authorized by the Wagner-Peyser Act and is paid out of federal funds granted by the U.S. Department of Labor.

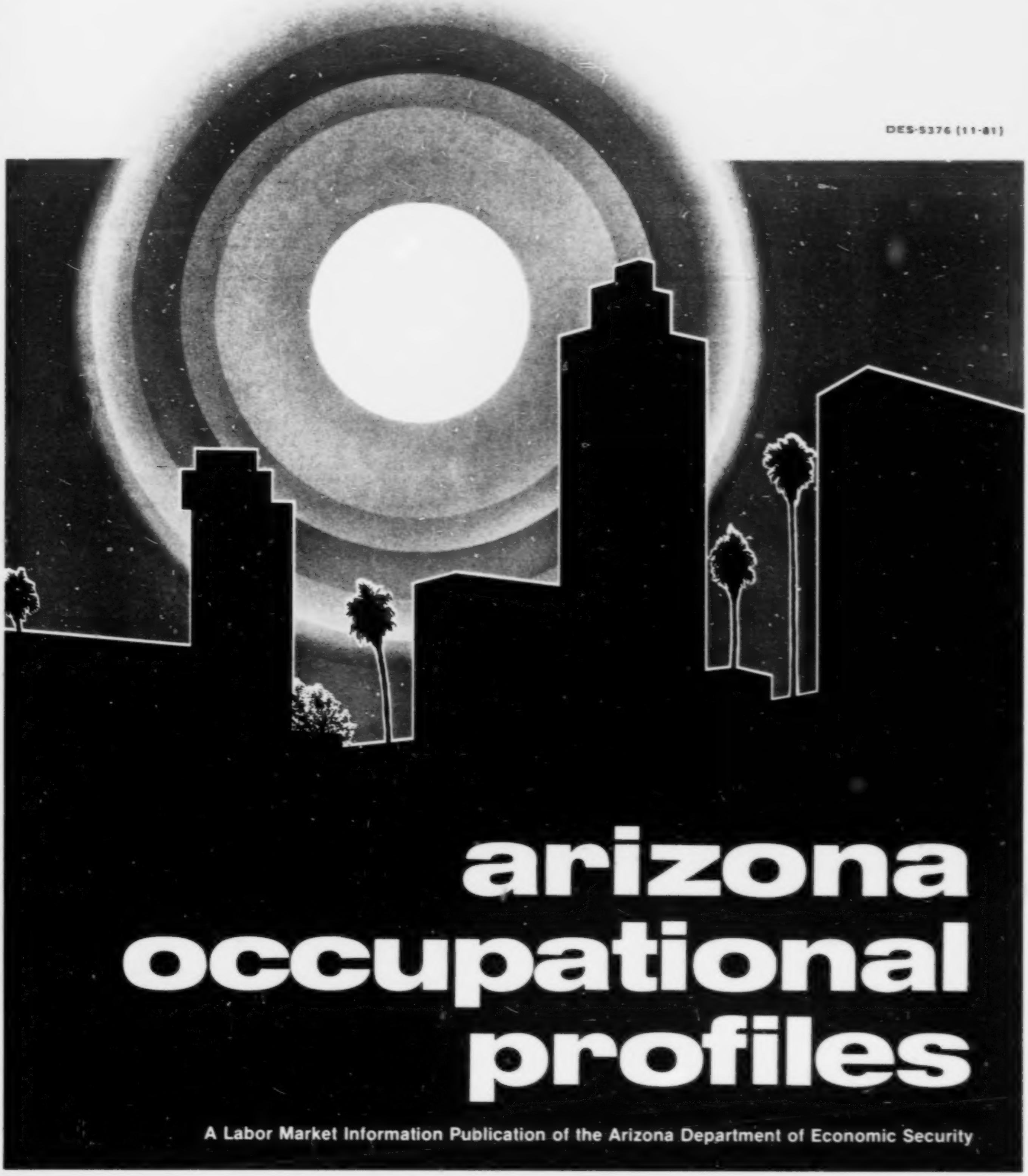
If you do NOT desire to continue receiving this publication, please check here ☐ and return this cover to address below.

If your address has changed, please indicate change and return this cover to the address below.

HOSPITAL

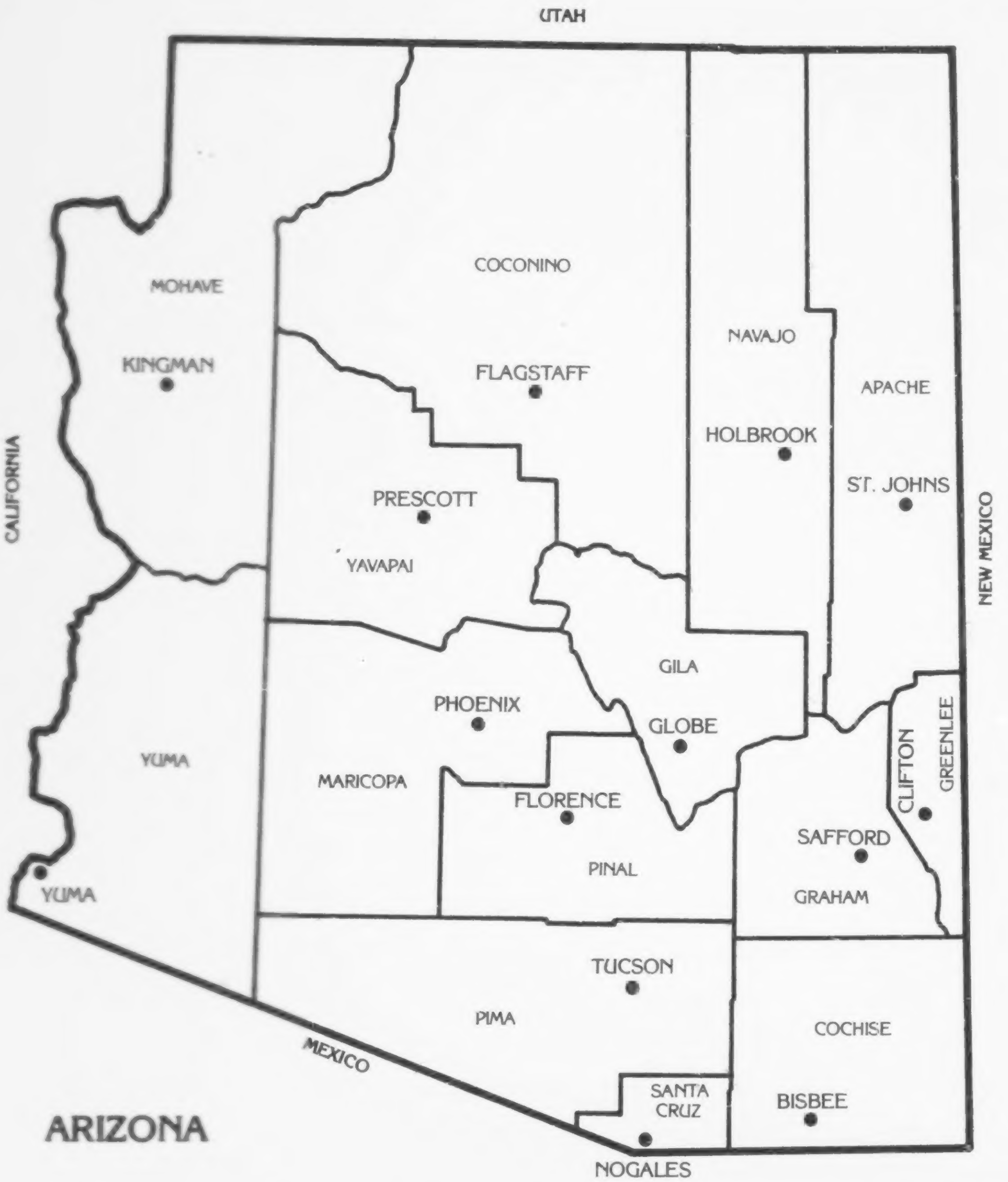
DECEMBER 1981

DES-5376 (11-81)



arizona occupational profiles

A Labor Market Information Publication of the Arizona Department of Economic Security


UTAH
MOHAVE
COCONINO
NAVAJO
KINGMAN
FLAGSTAFF
APACHE
HOLBROOK
CALIFORNIA
ST. JOHNS
PRESCOTT
NEW MEXICO
YAVAPAI
GILA
PHOENIX
GLOBE
YUMA
MARICOPA
CLIFTON
GREENLEE
FLORENCE
SAFFORD
PINAL
YUMA
GRAHAM
TUCSON
PIMA
COCHISE
MEXICO
SANTA CRUZ
BISBEE
ARIZONA
NOGALES

OCCUPATIONAL PROFILES

This Occupational Profile is one in a series of publications produced from information developed by the Occupational Employment Statistics survey. The survey is used to collect employment data, by county, for over 1,100 occupations in Arizona. From these surveys, which require the cooperation of the Arizona business community, current employment in the various occupations is determined, and from this an occupational outlook is formulated. The Occupational Profiles contain the survey findings and examine, individually, the industries of Arizona.

Industries surveyed and for which profiles are now available include:

- Mining
- Finance, Insurance, and Real Estate
- Construction
- Services
- Government
- Trade
- Education Services
- Manufacturing
- Transportation, Communications, and Public Utilities
- Hospitals

For further information, or to comment on any aspect of this program, please write to the address on the back cover.

INDUSTRY INFORMATION

INDUSTRY DESCRIPTION

This industry group includes establishments primarily engaged in providing diagnostic services, extensive medical treatment including surgery, continuous nursing services, as well as other hospital services. These establishments have an organized medical staff, inpatient beds, and equipment and facilities to provide complete health care.

Hospitals bring together various types of personnel and facilities for specific health maintenance and lifesaving efforts and related public health, educational, and research activities.

A more detailed description of the hospital services industry may be found in the Standard Industrial Classification (SIC) Manual[1] under code 806.

INDUSTRY CHARACTERISTICS

Hospitals are the largest single employer of health workers in Arizona. In 1980, employment in Arizona's hospitals averaged 41,000,[2] representing four percent of Arizona's workers.

General hospitals represent more than 90 percent of all hospitals in Arizona and employ approximately 95 percent of hospital workers. These hospitals care for patients with medical conditions which require diagnosis and medical/surgical treatment involving patient stay of a few days to a few weeks.

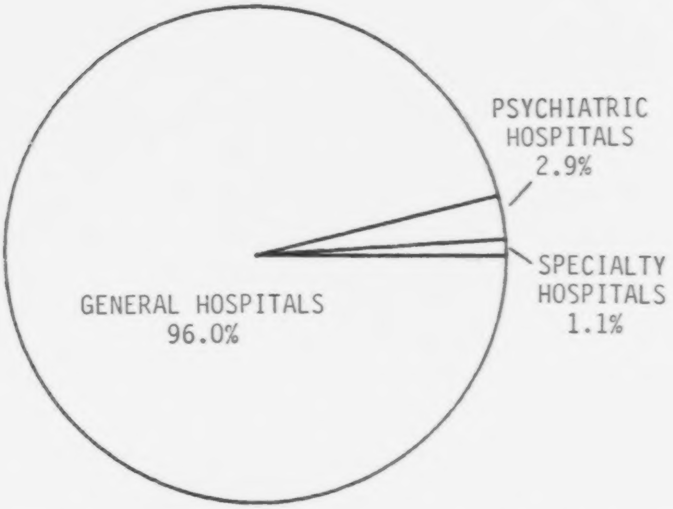
Psychiatric hospitals are specialty establishments which provide diagnostic services and inpatient treatment for the mentally ill. Because patients are often hospitalized for several weeks or more, these and other specialty hospitals are generally referred to as "long term" care facilities. The five psychiatric hospitals in Arizona employ less than 5 percent of the hospital workers in the State.

Specialty hospitals, except psychiatric, provide diagnostic and treatment services for specific conditions and diseases such as pregnancy; children's ailments; geriatric conditions; tuberculosis; eye, ear nose and throat diseases; and orthopedics. In 1980, the total average employment for Arizona's three specialty hospitals (two in Phoenix and one in Tucson) was 450 workers.

[1] Standard Industrial Classification Manual 1972 (Washington, D.C: U.S. Government Printing Office, 1972), p. 322.

[2] Hospitals owned and operated by firms primarily involved in other activities, i.e., mining and education, are not included.

FIGURE 1: HOSPITAL EMPLOYMENT
BY ACTIVITY, 1980



Hospital employment is concentrated in metropolitan areas, and its geographic distribution is similar to that of total Arizona employment. The number of hospitals, however, is divided equally between the metropolitan and rural counties. Approximately half of all Arizona hospitals are located outside of Maricopa and Pima counties, yet, they employ only 13 percent of Arizona's hospital workers. Based on this distribution, metropolitan hospitals employ an average 835 workers, whereas their rural counterparts average 130 employees. More specialized and a wider range of services to accommodate urban populations necessitates larger staffs. All psychiatric and specialty hospitals are located in Maricopa and Pima counties.

FIGURE 2: HOSPITAL
EMPLOYMENT BY AREA
MAY 1980

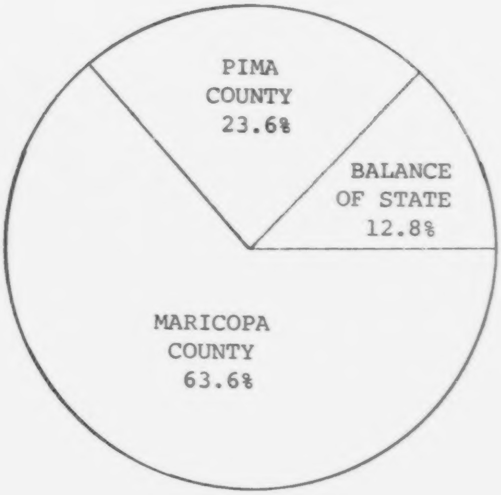
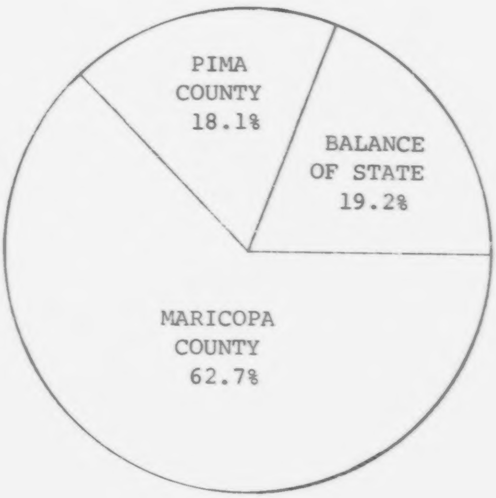


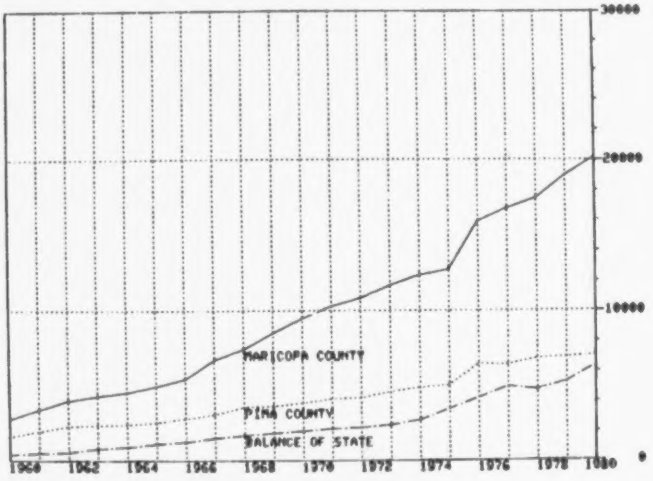
FIGURE 3: TOTAL ARIZONA
EMPLOYMENT BY AREA
MAY 1980



INDUSTRY TRENDS

Hospital employment has shown consistent growth in Arizona over the past two decades and more dramatic increases since 1975. Although the Balance of State (nonmetropolitan counties) has shown the greatest percentage growth (80 percent) in the last five years, most new jobs materialized in Maricopa County.

FIGURE 4: HOSPITAL EMPLOYMENT
1960-1980



SOURCE: DES., LABOR MARKET INFORMATION SEPT 1981

Employment growth in Arizona's hospitals will maintain this upward trend with population growth - particularly among the elderly - and expansion of coverage under prepayment programs that make it easier for persons to pay for hospital and medical care. Medical and technical advances have increased the level and scope of services available and often require additional manpower.

Since 1972, ten hospitals have opened in Arizona - seven of them in the two major metropolitan counties. This same time period witnessed the closure of seven hospitals, including two each in Maricopa and Pima counties.

Employment in the hospital industry is expected to increase nearly 16 percent between 1980 and 1984. All counties are expected to see growth in terms of numbers of hospital workers, but Maricopa County, with 64 percent of Arizona's hospital employment, can expect the most job opportunities. Mike Quinn, Executive Director for Personnel Management Services of Samaritan Health Services, feels that"the hospital and health care industry outlook for Arizona is as bright and promising as the growth potential for the State in the coming decade." The rapid growth of recent decades, however, will not likely be matched in coming years. To meet the needs of a burgeoning population in the 1950's and 60's, numerous new hospitals opened - particularly in Maricopa County.

The emergence of independent laboratories and specialized medical services may have far reaching impact on the health delivery system in the future and could, to some degree, suppress employment growth in the hospital industry. Expanding services in this so-called medical industrial complex encompass for-profit health maintenance organizations, mobile computerized X-ray scanners, dental clinics and centers for long-term kidney dialysis.

Of debatable impact on hospital expansion will be possible federal deregulation of the industry, which appears to be forthcoming. With complete deregulation, certificate-of-need hearings by regional health systems agencies would no longer be required by the federal government to evaluate the number of new beds allowed into the system.

Although primary emphasis is placed on the care of bed patients, the frontier for the hospital industry in recent years has been extended from the sick person in the hospital bed to the sick or potentially sick person in his normal living situation. In addition to outpatient clinics, for example, hospitals have been assuming more responsibility for programs of preventive medicine. They serve as the medium in many communities through which physicians and nurses, along with voluntary and official health agencies, pool their efforts for improvement of the public health.

© 1981 VOLK

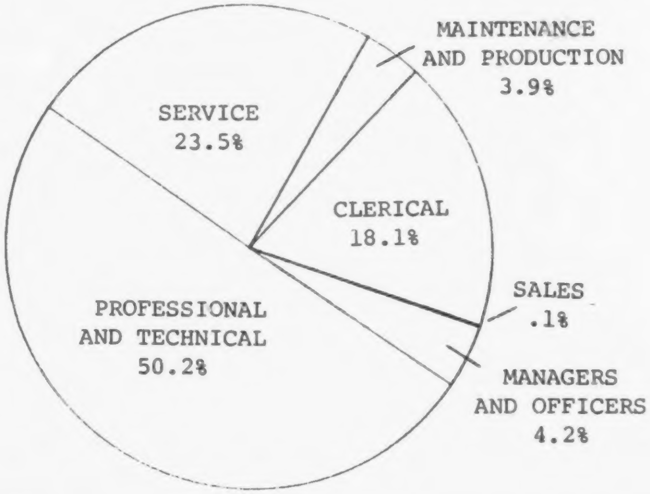
OCCUPATIONAL INFORMATION

Hospital employees are engaged in a broad range of medical and administrative activities requiring a variety of occupational skills. In addition to the medical personnel that we traditionally associate with this industry, hospitals also employ accountants and auditors, engineers, professional librarians and other seemingly unrelated occupations. In some respects, the hospital resembles and incorporates activities usually found in commercial enterprises. In addition to the business, administrative, and service departments commonly found in commercial firms, the hospital often includes a power plant, dietary service, and maintenance staff.

Furthermore, the hospital brings together various types of personnel and facilities for specific lifesaving efforts and related public health, educational, and research activities. Although there is no typical hospital, each participates, to some degree, in all of the related activities. Hospital personnel must work, therefore, in an atmosphere of coordinated effort which reflects the breadth of hospital functions.

Although the hospital environment encompasses personnel with a variety of occupational skills, the bulk of hospital employees are in health related occupations which are of a professional or technical nature. Professional workers represent the largest occupational class in the industry, followed by service workers and clerical workers.

FIGURE 5: OCCUPATIONS IN HOSPITALS
MAY 1980



Professional workers dominate because of the 8,500 nurses which constitute 72 percent of the category. Nearly half of the service workers are nurse's aides and/or orderlies; while the largest occupation in the clerical category is general office clerk. Figure 6 beginning on page 7 presents the occupations with the greatest employment in each of the fourteen counties.

A comparison of the staffing patterns of rural and urban hospitals indicates that metropolitan hospitals employ a larger percentage of professional occupations. Further examination reveals that while one of every four workers in the metropolitan hospitals is a registered nurse, the ratio is one in five for rural hospitals.

Urban hospitals also employ relatively fewer service workers than their rural counterparts. This is due to the smaller percentage of nurse's aides and orderlies employed in metropolitan hospitals as compared to rural hospitals - 9 percent versus 17 percent, respectively.

Professional, service, and technical occupations will provide the greatest number of job opportunities resulting from industry growth and separations from the labor force. Openings resulting from turnovers, however, will provide many more opportunities - especially in certain service and clerical occupations.

Professional nurses and nurse's aides and orderlies will be in greatest demand followed by licensed practical nurses. Robert Grams, Vice President of the Arizona Hospital Association, advises that "there are unlimited opportunities for young people desirous of careers as registered nurses and physical therapists; in fact, there is no end to the demand for R.N.'s." Figure 6 lists, by county, those occupations most frequently reported and with the greatest number of projected openings. For comparison, the most frequently reported occupations for the State rank as follows:

	Estimated 1980 Employment	Percent of State Total Employment in Hospitals
Nurses, Professional	8,540	24.2
Nurse's Aides and/or Orderlies	3,655	10.3
Licensed Practical Nurses	2,082	5.9
Managers and Officers	1,474	4.2
Maids	1,326	3.8
General Clerks, Office	973	2.8

For most occupations, demand is, to a great extent, dictated by the occupation's employment level. Those with large employment levels have greater replacement requirements, and generally are impacted more by the growth or decline of their industry. In contrast are occupations that transpire because of technological advances and operational improvements. Advances in medical science and technology contributed greatly to the emergence of occupations such as electrocardiograph and electroencephalograph technicians, who operate equipment that monitors certain heart and brain activities. Due to changes in medical technology in all facets of health care, Mike Quinn of Samaritan Health Services foresees "definite growth in certain emerging careers, viz., bio-medical engineering, bio-feedback, preventative health care occupations and rehabilitative occupations, to name a few."

The quest for ever increaing efficiency often affects roles and responsibilities of hospital personnel and, in some cases, gives rise to new occupations. Some registered nurses, for example, now become nurse practitioners and perform services, such as physical examinations, that have traditionally been handled by physicians.

Although they may not account for a great number of job openings, emerging occupations may offer attractive possibilities to job seekers in that the demand is often greater than the limited supply of qualified applicants.

FIGURE 6: LARGEST AND HIGHEST DEMAND OCCUPATIONS IN THE HOSPITAL INDUSTRY

MAY 1980				
LARGEST OCCUPATIONS	ESTIMATED EMPLOYMENT	PCT. OF COUNTY TOTAL	HIGHEST DEMAND OCCUPATIONS 1980-1984	OPENINGS 1980-1984
APACHE				
Nurses, Professional	28	15.0	Nurses, Professional	13
Nurse's Aides &/or Orderlies	25	13.0	Nurse's Aides &/or Orderlies	10
File Clerks	18	9.6	File Clerks	9
Maids	12	6.4	Maids	6
COCHISE				
Nurses, Professional	111	19.5	Nurses, Professional	41
Nurse's Aides &/or Orderlies	86	15.1	Nurse's Aides &/or Orderlies	32
Licensed Practical Nurses	34	6.0	Licensed Practical Nurses	13
Managers & Officers	23	4.0	Maids	11
Maids	23	4.0	Kitchen Helpers	6
COCONINO				
Nurses, Professional	146	31.6	Nurses, Professional	54
Nurse's Aides &/or Orderlies	65	14.1	Nurse's Aides &/or Orderlies	26
Managers & Officers	58	12.6	Managers & Officers	16
Maids	27	5.8	Maids	12
Kitchen Helpers	13	2.8	Switchboard Operators	7
GILA				
Nurse's Aides &/or Orderlies	110	22.4	Nurse's Aides &/or Orderlies	44
Nurses, Professional	88	17.9	Nurses, Professional	33
Licensed Practical Nurses	47	9.6	Licensed Practical Nurses	19
Maids	38	7.7	Maids	16
Kitchen Helpers	22	4.5	Kitchen Helpers	7

FIGURE 6: LARGEST AND HIGHEST DEMAND OCCUPATIONS IN THE HOSPITAL INDUSTRY (CONT'D.)

MAY 1980				
LARGEST OCCUPATIONS	ESTIMATED EMPLOYMENT	PCT. OF COUNTY TOTAL	HIGHEST DEMAND OCCUPATIONS 1980-1984	OPENINGS 1980-1984
GRAHAM				
Nurses, Professional	28	25.9	Nurses, Professional	13
Nurse's Aides &/or Orderlies	23	21.3	Nurse's Aides, Orderlies	8
Maids	7	6.5		
MARICOPA				
Nurses, Professional	5,614	25.0	Nurses, Professional	2,300
Nurse's Aides &/or Orderlies	2,069	9.2	Nurse's Aides &/or Orderlies	864
Licensed Practical Nurses	1,336	5.9	Licensed Practical Nurses	600
Managers & Officers	933	4.2	Maids	303
Maids	661	2.9	Managers & Officers	266
MOHAVE				
Nurses, Professional	83	16.0	Nurses, Professional	33
Nurse's Aides &/or Orderlies	69	13.3	Nurse's Aides &/or Orderlies	26
Licensed Practical Nurses	44	8.5	Licensed Practical Nurses	19
Kitchen Helpers	37	7.1	Kitchen Helpers	13
Switchboard Opers./Recepts.	20	3.9	Switchboard Opers./Recepts.	9
NAVAJO				
Nurses, Professional	53	22.9	Nurses, Professional	21
Nurse's Aides &/or Orderlies	37	16.0	Nurse's Aides &/or Orderlies	14
Maids	11	4.8	Maids	5
Cooks, Institution	11	4.8	Licensed Practical Nurses	5
PIMA				
Nurses, Professional	2,013	24.1	Nurses, Professional	776
Nurse's Aides &/or Orderlies	818	9.8	Nurse's Aides &/or Orderlies	321
Maids	427	5.1	Maids	182
Licensed Practical Nurses	422	5.1	Licensed Practical Nurses	180
Managers & Officers	385	4.6	General Clerks, Office	105

FIGURE 6: LARGEST AND HIGHEST DEMAND OCCUPATIONS IN THE HOSPITAL INDUSTRY (CONT'D.)

MAY 1980				
LARGEST OCCUPATIONS	ESTIMATED EMPLOYMENT	PCT. OF COUNTY TOTAL	HIGHEST DEMAND OCCUPATIONS 1980-1984	OPENINGS 1980-1984
PINAL				
Nurse's Aides &/or Orderlies	87	20.7	Nurse's Aides &/or Orderlies	33
Nurses, Professional	66	15.7	Nurses, Professional	26
Licensed Practical Nurses	42	10.0	Licensed Practical Nurses	19
Maids	26	6.2	Maids	12
Kitchen Helpers	18	4.3	Kitchen Helpers	7
SANTA CRUZ				
Nurse's Aides &/or Orderlies	40	32.3	Nurse's Aides &/or Orderlies	16
Nurses, Professional	19	15.3	Nurses, Professional	8
Kitchen Helpers	10	8.1	Kitchen Helpers	6
YAVAPAI				
Nurses, Professional	140	23.2	Nurses, Professional	54
Nurse's Aides &/or Orderlies	91	15.1	Nurse's Aides &/or Orderlies	35
Licensed Practical Nurses	37	6.1	Licensed Practical Nurses	15
Maids	35	5.8	Maids	13
Managers & Officers	26	4.3	Managers & Officers	8
YUMA				
Nurses, Professional	151	19.0	Nurses, Professional	58
Nurse's Aides &/or Orderlies	135	17.0	Nurse's Aides &/or Orderlies	53
Licensed Practical Nurses	95	12.0	Licensed Practical Nurses	41
General Clerks, Office	57	7.2	General Clerks, Office	21
Maids	41	5.2	Maids	18

OCCUPATIONAL STRUCTURE

The following fourteen tables provide employment estimates and projected employment and job openings for the counties and the State.

When using the data, please note the following:

1) The data reflects full and part-time wage and salary employment only and does not include self-employed or unpaid family workers.

2) Total job openings represent the number of openings due to growth of the industry and separations from the labor force. They do not account for labor turnover, i.e., openings created when a worker changes jobs, leaving the job to be filled by someone else. These vacancies are generally the largest source of job openings.

3) The projection technique does not possess the degree of accuracy that may be implied by small employment changes and demand figures.

4) Employment in federally administered hospitals is not included.

CURRENT AND PROJECTED ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

STATEWIDE

	Estimated 1980 Employment	Percent of Total 1980 Employment	Projected 1984 Employment	Percent of Total 1984 Employment	Total Job Openings 1980-1984
TOTAL MANAGERS & OFFICERS	1,474	4.2	1,698	4.1	406
TOTAL PROFESSIONAL WORKERS	11,867	33.6	13,769	33.7	4,460
Civil Engineers	65	0.2	75		18
Electrical & Electronic Engineers	12	0.0	14		2
Industrial Engineers	9	0.0	10		1
Mechanical Engineers	5	0.0	6		1
All Other Engineers	1	0.0	1		0
Mathematicians	3	0.0	3		0
Statisticians	31	0.1	36		9
All Other Mathematical Scientists	2	0.0	2		0
Chemists	2	0.0	2		0
Physicists	3	0.0	3		0
Biological Scientists	8	0.0	9		1
Medical Scientists	13	0.0	15		2
Psychologists	61	0.2	71		14
Sociologists	30	0.1	35		9
All Other Social Scientists	5	0.0	6		1
Systems Analysts, EDP	41	0.1	48		7
Purchasing Agents &/or Buyers	60	0.2	70		18
Accountants & Auditors	96	0.3	111		29
Caseworkers	282	0.8	327		101
Chiropractors	2	0.0	2		0
Clergy	34	0.1	39		9
Dentists	21	0.0	24		3
Dietitians &/or Nutritionists	125	0.4	145		50
Lawyers	6	0.0	7		1
Librarians, Professional	58	0.2	67		24
Nurses, Professional	8,540	24.2	9,913		3,420
Occupational Therapists	66	0.2	77		23
Personnel & Labor Relations Specialists	89	0.3	103		26
Pharmacists	310	0.9	360		108
Physical Therapists	191	0.5	222		65
Physicians &/or Surgeons	789	2.2	915		224
Podiatrists	18	0.0	21		7
All Other Therapists	28	0.1	32		8
Manual-Arts, Music, &/or Recreational Therapists	27	0.1	31		8
Speech Pathologists &/or Audiologists	33	0.1	38		9
Audiometrists	2	0.0	2		0
Respiratory Therapists	519	1.5	602		175
All Other Professional Workers	280	0.8	325		87
TOTAL TECHNICAL WORKERS	5,881	16.6	6,819	16.7	2,514
Computer Programmers	22	0.0	26		4
Drafters	2	0.0	2		0
Electrical & Electronic Technicians	34	0.1	39		5
All Other Engineering Technicians	19	0.0	22		3
Biological Science Technicians	36	0.1	42		10
All Other Science Technicians	128	0.4	148		32
Dental Assistants	41	0.1	48		21
Licensed Practical Nurses	2,082	5.9	2,414		913
Physician's Assistants	12	0.0	14		6
Orthopists	2	0.0	2		0
Surgical Technicians	306	0.9	355		99
Radiologic Technicians	294	0.8	341		105
Pharmacy Helpers	245	0.7	284		101
Medical-Records Librarians	109	0.3	126		52
Dental Hygienists	4	0.0	5		1
Medical Laboratory Technologists	682	1.9	791		257
Biochemistry Technologists	46	0.1	53		15
Microbiology Technologists	70	0.2	81		27

CURRENT AND PROJECTED ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

STATEWIDE (Continued)

	Estimated 1980 Employment	Percent of Total 1980 Employment	Projected 1984 Employment	Percent of Total 1984 Employment	Total Job Openings 1980-1984
Cytotechnologists	15	0.0	17		6
Histologic Technologists	60	0.2	70		23
Prosthetists-Orthotists	1	0.0	1		0
Medical Laboratory Technicians	209	0.6	242		85
Electrocardiograph Technicians	171	0.5	198		55
Electroencephalograph Technicians	44	0.1	51		15
Dietetic Technicians	94	0.3	109		40
Blood Bank Technology Specialists	50	0.1	58		20
Physical Therapy Assistants	192	0.5	223		79
Radiologic &/or Nuclear Medical Technologists	357	1.0	414		147
All Other Medical & Dental Technicians	506	1.4	587		381
All Other Technicians	48	0.1	56		12
TOTAL SERVICE WORKERS	8,299	23.5	9,648	23.6	3,220
Maids	1,326	3.8	1,542		590
All Other Janitors, Porters, & Cleaners	272	0.8	316		86
Guards & Doorkeepers	226	0.6	263		45
Bakers, Bread &/or Pastry	16	0.0	19		7
Dining Room Attendants	93	0.3	108		19
Kitchen Helpers	597	1.7	694		219
Waiters/Waitresses	7	0.0	8		1
Counter Attendants, Cafeteria	106	0.3	123		43
Cooks, Short Order &/or Specialty Fast Foods	52	0.2	60		16
Pantry, Sandwich &/or Coffee Makers	46	0.1	53		16
Cooks, Institution	259	0.7	301		86
All Other Food Service Workers	500	1.4	581		183
Supervisors, Nonworking -- Service Only	194	0.6	226		48
Housekeepers	160	0.5	186		63
Nurse's Aides &/or Orderlies	3,655	10.3	4,250		1,480
Psychiatric Aides	276	0.8	321		112
Orthopedic-Cast Specialists	18	0.0	21		7
Child-Care Workers	26	0.1	30		12
Social Service Aides	49	0.1	57		18
Medical Assistants	49	0.1	57		20
Occupational Therapy Assistants	113	0.3	131		47
All Other Service Workers	259	0.7	301		102
TOTAL MAINTENANCE & PRODUCTION WORKERS	1,382	3.9	1,581	3.9	370
Mechanics, Automotive	6	0.0	7		1
Electromedical Equipment Repairers	43	0.1	49		10
Mechanics, Maintenance	45	0.1	51		10
All Other Mechanics & Repairers	21	0.0	24		3
Washers &/or Starchers, Machine	67	0.2	77		27
Laundry Pressers, Machine	230	0.7	263		91
Truck Drivers	6	0.0	7		1
Carpenters	49	0.1	56		11
Delivery &/or Route Workers	19	0.0	22		3
Electricians	49	0.1	56		11
Supervisors, Nonworking	78	0.2	89		17
Inspectors	1	0.0	1		0
Maintenance Repairers, General Utility	260	0.7	298		56
Helpers, Trades	39	0.1	45		10
Order Fillers	3	0.0	3		0
Painters, Maintenance	40	0.1	46		10
Plumbers &/or Pipefitters	26	0.1	30		6
Custom Sewers	5	0.0	6		1
Stationary Boiler Firers	24	0.1	27		7
Stationary Engineers	110	0.3	126		28
Opticians, Dispensing &/or Optical Mechanics	1	0.0	1		0
Gardeners & Groundskeepers	61	0.2	70		18
Ambulance Drivers &/or Attendants	38	0.1	43		9
All Other Skilled Craft Workers	8	0.0	9		1

CURRENT AND PROJECTED ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

STATEWIDE (Continued)

	Estimated 1980 Employment	Percent of Total 1980 Employment	Projected 1984 Employment	Percent of Total 1984 Employment	Total Job Openings 1980-1984
All Other Operatives & Semiskilled Workers	126	0.4	144		31
All Other Laborers & Unskilled Workers	27	0.1	31		8
TOTAL CLERICAL WORKERS	6,412	18.1	7,323	17.9	2,495
Bookkeeping &/or Billing Machine Operators	30	0.1	34		12
Computer Operators	96	0.3	110		26
Keypunch Operators	144	0.4	164		57
Peripheral EDP Equipment Operators	14	0.0	16		6
All Other Office Machine Operators	23	0.0	26		11
Stenographers	348	1.0	397		137
Accounting Clerks	189	0.5	216		70
Bookkeepers, Hand	56	0.2	64		20
Cashiers	137	0.4	156		51
File Clerks	339	1.0	387		154
General Clerks, Office	973	2.8	1,112		375
Library Assistants	19	0.0	22		7
Insurance Clerks, Medical	457	1.3	522		175
Order Clerks	67	0.2	77		26
Payroll &/or Timekeeping Clerks	67	0.2	77		24
Personnel Clerks	77	0.2	88		35
Procurement Clerks	44	0.1	50		10
Receptionists	299	0.8	341		135
Secretaries	770	2.2	879		320
Statistical Clerks	121	0.3	138		46
Switchboard Operators	250	0.7	286		115
Switchboard Operators/Receptionists	89	0.3	102		41
Typists	316	0.9	361		140
Clerical Supervisors	236	0.7	270		63
All Other Office Clerical Workers	885	2.5	1,011		339
Production Clerks &/or Coordinators	29	0.1	33		8
Shipping Packers	43	0.1	49		10
Shipping &/or Receiving Clerks	65	0.2	74		13
Stock Clerks, Stockroom	130	0.4	148		32
Dispatchers, Ambulance	16	0.0	18		5
All Other Plant Clerical Workers	83	0.2	95		32
TOTAL SALES WORKERS	14	0.0	16	0.1	2
Sales Representatives	1	0.0	1		0
Sales Clerks	13	0.0	15		2
TOTAL ALL OCCUPATIONS	35,329	100.0	40,854	100.0	13,467

CURRENT AND PROJECTED ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

APACHE COUNTY

	Estimated 1980 Employment	Projected 1984 Employment	Job Openings Due to Growth 1980-1984	Job Openings Due to Separations 1980-1984	Total Job Openings 1980-1984
TOTAL MANAGERS & OFFICERS	3	3	0	0	0
TOTAL PROFESSIONAL WORKERS	54	62	8	8	16
Purchasing Agents &/or Buyers	2	2	0	0	0
Accountants & Auditors	2	2	0	0	0
Caseworkers	3	4	1	0	1
Dentists	2	2	0	0	0
Dietitians &/or Nutritionists	1	1	0	0	0
Lawyers	2	2	0	0	0
Nurses, Professional	28	33	5	8	13
Personnel & Labor Relations Specialists	2	2	0	0	0
Pharmacists	2	2	0	0	0
Physicians &/or Surgeons	6	7	1	0	1
Respiratory Therapists	1	1	0	0	0
All Other Professional Workers	3	4	1	0	1
TOTAL TECHNICAL WORKERS	21	24	3	0	3
Electrical & Electronic Technicians	1	1	0	0	0
Dental Assistants	2	2	0	0	0
Licensed Practical Nurses	3	4	1	0	1
Radiologic Technicians	3	4	1	0	1
Pharmacy Helpers	2	2	0	0	0
Medical-Records Librarians	1	1	0	0	0
Medical Laboratory Technologists	7	8	1	0	1
Biochemistry Technologists	1	1	0	0	0
All Other Technicians	1	1	0	0	0
TOTAL SERVICE WORKERS	51	58	7	10	17
Maids	12	14	2	4	6
Dining Room Attendants	1	1	0	0	0
Cooks, Institution	8	9	1	0	1
Supervisors, Nonworking -- Service Only	1	1	0	0	0
Housekeepers	3	3	0	0	0
Nurse's Aides &/or Orderlies	25	29	4	6	10
Social Service Aides	1	1	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	11	12	1	0	1
Mechanics, Maintenance	1	1	0	0	0
Delivery &/or Route Workers	1	1	0	0	0
Electricians	1	1	0	0	0
Helpers, Trades	1	1	0	0	0
Plumbers &/or Pipefitters	1	1	0	0	0
Stationary Engineers	1	1	0	0	0
Ambulance Drivers &/or Attendants	5	6	1	0	1
TOTAL CLERICAL WORKERS	47	53	6	6	12
Stenographers	1	1	0	0	0
Cashiers	1	1	0	0	0
File Clerks	18	21	3	6	9
General Clerks, Office	4	5	1	0	1
Insurance Clerks, Medical	1	1	0	0	0
Payroll &/or Timekeeping Clerks	1	1	0	0	0
Personnel Clerks	2	2	0	0	0
Receptionists	1	1	0	0	0
Secretaries	4	5	1	0	1
Switchboard Operators/Receptionists	2	2	0	0	0
Typists	4	5	1	0	1
Clerical Supervisors	2	2	0	0	0
All Other Office Clerical Workers	2	2	0	0	0
Stock Clerks, Stockroom	2	2	0	0	0
Dispatchers, Ambulance	2	2	0	0	0
TOTAL ALL OCCUPATIONS	187	212	25	24	49

CURRENT AND PROJECTED ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

COCHISE COUNTY

	Estimated 1980 Employment	Projected 1984 Employment	Job Openings Due to Growth 1980-1984	Job Openings Due to Separations 1980-1984	Total Job Openings 1980-1984
TOTAL MANAGERS & OFFICERS	23	26	3	4	7
TOTAL PROFESSIONAL WORKERS	159	181	22	26	48
Mechanical Engineers	1	1	0	0	0
Mathematicians	3	3	0	0	0
Statisticians	1	1	0	0	0
Purchasing Agents &/or Buyers	4	5	1	0	1
Accountants & Auditors	4	5	1	0	1
Caseworkers	2	2	0	0	0
Dietitians &/or Nutritionists	2	2	0	0	0
Librarians, Professional	4	5	1	0	1
Nurses, Professional	111	126	15	26	41
Occupational Therapists	2	2	0	0	0
Personnel & Labor Relations Specialists	2	2	0	0	0
Pharmacists	6	7	1	0	1
Physical Therapists	4	5	1	0	1
Respiratory Therapists	6	7	1	0	1
All Other Professional Workers	7	8	1	0	1
TOTAL TECHNICAL WORKERS	90	102	12	16	28
Computer Programmers	2	2	0	0	0
All Other Engineering Technicians	1	1	0	0	0
Licensed Practical Nurses	34	39	5	8	13
Surgical Technicians	4	5	1	0	1
Radiologic Technicians	8	9	1	0	1
Pharmacy Helpers	4	5	1	0	1
Medical-Records Librarians	9	10	1	4	5
Medical Laboratory Technologists	4	5	1	0	1
Biochemistry Technologists	2	2	0	0	0
Microbiology Technologists	1	1	0	0	0
Medical Laboratory Technicians	10	11	1	4	5
Dietetic Technicians	2	2	0	0	0
Physical Therapy Assistants	5	6	1	0	1
Radiologic &/or Nuclear Medical Technologists	2	2	0	0	0
All Other Technicians	2	2	0	0	0
TOTAL SERVICE WORKERS	181	207	26	39	65
Maids	23	26	3	8	11
All Other Janitors, Porters, & Cleaners	13	15	2	3	5
Guards & Doorkeepers	3	3	0	0	0
Dining Room Attendants	4	5	1	0	1
Kitchen Helpers	13	15	2	4	6
Waiters/Waitresses	2	2	0	0	0
Counter Attendants, Cafeteria	4	5	1	0	1
Cooks, Institution	14	16	2	4	6
All Other Food Service Workers	6	7	1	0	1
Supervisors, Nonworking -- Service Only	6	7	1	0	1
Housekeepers	5	6	1	0	1
Nurse's Aides &/or Orderlies	86	98	12	20	32
Social Service Aides	1	1	0	0	0
Occupational Therapy Assistants	1	1	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	25	28	3	0	3
Mechanics, Automotive	1	1	0	0	0
Electromedical Equipment Repairers	1	1	0	0	0
Mechanics, Maintenance	2	2	0	0	0
Carpenters	1	1	0	0	0
Supervisors, Nonworking	3	3	0	0	0
Maintenance Repairers, General Utility	9	11	2	0	2
Helpers, Trades	2	2	0	0	0
Painters, Maintenance	1	1	0	0	0

CURRENT AND PROJECTED ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

COCHISE COUNTY (Continued)

	Estimated 1980 Employment	Projected 1984 Employment	Job Openings Due to Growth 1980-1984	Job Openings Due to Separations 1980-1984	Total Job Openings 1980-1984
Stationary Engineers	2	2	0	0	0
Gardeners & Groundskeepers	3	4	1	0	1
TOTAL CLERICAL WORKERS	90	101	11	4	15
Computer Operators	4	4	0	0	0
Keypunch Operators	3	3	0	0	0
Accounting Clerks	2	2	0	0	0
Bookkeepers, Hand	2	2	0	0	0
Cashiers	6	7	1	0	1
File Clerks	4	4	0	0	0
General Clerks, Office	5	6	1	0	1
Library Assistants	1	1	0	0	0
Insurance Clerks, Medical	9	11	2	0	2
Order Clerks	2	2	0	0	0
Payroll &/or Timekeeping Clerks	4	4	0	0	0
Personnel Clerks	2	2	0	0	0
Procurement Clerks	5	6	1	0	1
Receptionists	7	8	1	0	1
Secretaries	5	6	1	0	1
Statistical Clerks	1	1	0	0	0
Switchboard Operators	5	6	1	0	1
Switchboard Operators/Receptionists	9	11	2	4	6
Clerical Supervisors	4	4	0	0	0
All Other Office Clerical Workers	2	2	0	0	0
Snipping &/or Receiving Clerks	1	1	0	0	0
Stock Clerks, Stockroom	1	1	0	0	0
All Other Plant Clerical Workers	6	7	1	0	1
TOTAL ALL OCCUPATIONS	568	645	77	89	166

CURRENT AND PROJECTED ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

COCONINO COUNTY

	Estimated 1980 Employment	Projected 1984 Employment	Job Openings Due to Growth 1980-1984	Job Openings Due to Separations 1980-1984	Total Job Openings 1980-1984
TOTAL MANAGERS & OFFICERS	58	66	8	8	16
TOTAL PROFESSIONAL WORKERS	156	177	21	34	55
Purchasing Agents &/or Buyers	1	1	0	0	0
Accountants & Auditors	1	1	0	0	0
Caseworkers	1	1	0	0	0
Dietitians &/or Nutritionists	1	1	0	0	0
Nurses, Professional	146	166	20	34	54
Pharmacists	4	5	1	0	1
Physical Therapists	1	1	0	0	0
Physicians &/or Surgeons	1	1	0	0	0
TOTAL TECHNICAL WORKERS	36	41	5	4	9
Licensed Practical Nurses	5	6	1	0	1
Surgical Technicians	4	5	1	0	1
Radiologic Technicians	2	2	0	0	0
Medical-Records Librarians	2	2	0	0	0
Medical Laboratory Technologists	12	14	2	4	6
Medical Laboratory Technicians	1	1	0	0	0
Radiologic &/or Nuclear Medical Technologists	10	11	1	0	1
TOTAL SERVICE WORKERS	139	159	20	29	49
Maids	27	31	4	8	12
All Other Janitors, Porters, & Cleaners	11	13	2	1	3
Guards & Doorkeepers	7	8	1	0	1
Kitchen Helpers	13	14	1	4	5
Cooks, Institution	9	10	1	0	1
Supervisors, Nonworking -- Service Only	3	3	0	0	0
Housekeepers	4	5	1	0	1
Nurse's Aides &/or Orderlies	65	75	10	16	26
TOTAL MAINTENANCE & PRODUCTION WORKERS	13	14	1	0	1
Electromedical Equipment Repairers	1	1	0	0	0
Washers &/or Starchers, Machine	2	2	0	0	0
Supervisors, Nonworking	2	2	0	0	0
Maintenance Repairers, General Utility	6	7	1	0	1
Stationary Engineers	1	1	0	0	0
Gardeners and Groundskeepers	1	1	0	0	0
TOTAL CLERICAL WORKERS	60	68	8	8	16
Bookkeeping &/or Billing Machine Operators	2	2	0	0	0
Keypunch Operators	1	1	0	0	0
Accounting Clerks	1	1	0	0	0
Cashiers	2	2	0	0	0
File Clerks	3	3	0	0	0
General Clerks, Office	11	14	3	4	7
Library Assistants	1	1	0	0	0
Insurance Clerks, Medical	6	7	1	0	1
Payroll &/or Timekeeping Clerks	1	1	0	0	0
Personnel Clerks	2	2	0	0	0
Procurement Clerks	2	2	0	0	0
Receptionists	2	2	0	0	0
Secretaries	5	6	1	0	1
Statistical Clerks	2	2	0	0	0
Switchboard Operators	12	15	3	4	7
Typists	3	3	0	0	0
Clerical Supervisors	1	1	0	0	0
Shipping &/or Receiving Clerks	2	2	0	0	0
Stock Clerks, Stockroom	1	1	0	0	0
TOTAL ALL OCCUPATIONS	462	525	63	83	146

CURRENT AND PROJECTED ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

GILA COUNTY

	Estimated 1980 Employment	Projected 1984 Employment	Job Openings Due to Growth 1980-1984	Job Openings Due to Separations 1980-1984	Total Job Openings 1980-1984
TOTAL MANAGERS & OFFICERS	4	6	2	0	2
TOTAL PROFESSIONAL WORKERS	113	128	15	20	35
All Other Engineers	1	1	0	0	0
Purchasing Agents &/or Buyers	2	2	0	0	0
Accountants & Auditors	1	1	0	0	0
Caseworkers	3	3	0	0	0
Dietitians &/or Nutritionists	1	1	0	0	0
Librarians, Professional	1	1	0	0	0
Nurses, Professional	88	101	13	20	33
Pharmacists	8	9	1	0	1
Physical Therapists	2	2	0	0	0
Physicians &/or Surgeons	1	1	0	0	0
Respiratory Therapists	5	6	1	0	1
TOTAL TECHNICAL WORKERS	93	105	12	16	28
Computer Programmers	2	2	0	0	0
Licensed Practical Nurses	47	54	7	12	19
Surgical Technicians	2	2	0	0	0
Radiologic Technicians	7	8	1	0	1
Pharmacy Helpers	4	5	1	0	1
Medical-Records Librarians	3	3	0	0	0
Medical Laboratory Technologists	6	7	1	0	1
Medical Laboratory Technicians	2	2	0	0	0
Electrocardiograph Technicians	1	1	0	0	0
Blood Bank Technology Specialists	9	10	1	4	5
Physical Therapy Assistants	5	6	1	0	1
Radiologic &/or Nuclear Medical Technologists	3	3	0	0	0
All Other Medical & Dental Techs.	2	2	0	0	0
TOTAL SERVICE WORKERS	198	226	28	41	69
Maids	38	43	5	11	16
All Other Janitors, Porters, & Cleaners	3	3	0	0	0
Guards & Doorkeepers	2	2	0	0	0
Kitchen Helpers	22	25	3	4	7
Cooks, Institution	10	11	1	0	1
All Other Food Service Workers	7	8	1	0	1
Supervisors, Nonworking -- Service Only	2	2	0	0	0
Housekeepers	3	3	0	0	0
Nurse's Aides &/or Orderlies	110	128	18	26	44
Social Service Aides	1	1	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	28	32	4	4	8
Laundry Pressers, Machine	12	14	2	4	6
Maintenance Repairers, General Utility	14	16	2	0	2
Gardeners & Groundskeepers	1	1	0	0	0
All Other Skilled Craft Workers	1	1	0	0	0
TOTAL CLERICAL WORKERS	56	62	6	0	6
Bookkeeping &/or Billing Machine Operators	2	2	0	0	0
Computer Operators	5	7	2	0	2
Stenographers	3	3	0	0	0
Bookkeepers, Hand	2	2	0	0	0
Cashiers	1	1	0	0	0
File Clerks	4	4	0	0	0
General Clerks, Office	2	2	0	0	0
Insurance Clerks, Medical	6	8	2	0	2
Payroll &/or Timekeeping Clerks	2	2	0	0	0
Personnel Clerks	1	1	0	0	0
Receptionists	3	3	0	0	0
Secretaries	3	3	0	0	0

CURRENT AND PROJECTED ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

GILA COUNTY (Continued)

	Estimated 1980 Employment	Projected 1984 Employment	Job Openings Due to Growth 1980-1984	Job Openings Due to Separations 1980-1984	Total Job Openings 1980-1984
Switchboard Operators	4	4	0	0	0
Switchboard Operators/Receptionists	4	4	0	0	0
Typists	2	2	0	0	0
All Other Office Clerical Workers	3	5	2	0	2
Shipping &/or Receiving Clerks	2	2	0	0	0
Stock Clerks, Stockroom	3	3	0	0	0
All Other Plant Clerical Workers	4	4	0	0	0
TOTAL ALL OCCUPATIONS	492	559	67	81	148

CURRENT AND PROJECTED ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

GRAHAM COUNTY

	Estimated 1980 Employment	Projected 1984 Employment	Job Openings Due to Growth 1980-1984	Job Openings Due to Separations 1980-1984	Total Job Openings 1980-1984
TOTAL MANAGERS & OFFICERS	1	1	0	0	0
TOTAL PROFESSIONAL WORKERS	31	36	5	8	13
Purchasing Agents &/or Buyers	1	1	0	0	0
Dietitians &/or Nutritionists	1	1	0	0	0
Nurses, Professional	28	33	5	8	13
Pharmacists	1	1	0	0	0
TOTAL TECHNICAL WORKERS	19	22	3	0	3
Licensed Practical Nurses	4	5	1	0	1
Surgical Technicians	2	2	0	0	0
Radiologic Technicians	2	2	0	0	0
Medical-Records Librarians	1	1	0	0	0
Medical Laboratory Technicians	5	6	1	0	1
Radiologic &/or Nuclear Medical Technologists	1	1	0	0	0
All Other Medical & Dental Techs.	4	5	1	0	1
TOTAL SERVICE WORKERS	43	49	6	4	10
Maids	7	8	1	0	1
Kitchen Helpers	5	6	1	0	1
Counter Attendants, Cafeteria	2	2	0	0	0
Cooks, Institution	2	2	0	0	0
Housekeepers	1	1	0	0	0
Nurse's Aides &/or Orderlies	23	27	4	4	8
All Other Service Workers	3	3	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	3	3	0	0	0
Washers &/or Starchers, Machine	2	2	0	0	0
Maintenance Repairers, General Utility	1	1	0	0	0
TOTAL CLERICAL WORKERS	11	12	1	0	1
Computer Operators	2	3	1	0	1
Stenographers	2	2	0	0	0
Bookkeepers, Hand	1	1	0	0	0
File Clerks	1	1	0	0	0
Insurance Clerks, Medical	1	1	0	0	0
Payroll &/or Timekeeping Clerks	1	1	0	0	0
Secretaries	2	2	0	0	0
Switchboard Operators/Receptionists	1	1	0	0	0
TOTAL ALL OCCUPATIONS	108	123	15	12	27

CURRENT AND PROJECTED ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

MARICOPA COUNTY

	Estimated 1980 Employment	Projected 1984 Employment	Job Openings Due to Growth 1980-1984	Job Openings Due to Separations 1980-1984	Total Job Openings 1980-1984
TOTAL MANAGERS & OFFICERS	933	1,083	150	116	266
TOTAL PROFESSIONAL WORKERS	7,917	9,252	1,335	1,708	3,043
Civil Engineers	65	76	11	8	19
Electrical & Electronic Engineers	6	7	1	0	1
Industrial Engineers	8	9	1	0	1
Mechanical Engineers	1	1	0	0	0
Statisticians	28	33	5	4	9
All Other Mathematical Scientists	2	2	0	0	0
Chemists	2	2	0	0	0
Physicists	3	4	1	0	1
Biological Scientists	5	6	1	0	1
Medical Scientists	4	5	1	0	1
Psychologists	53	62	9	4	13
Sociologists	30	35	5	4	9
All Other Social Scientists	4	5	1	0	1
Systems Analysts, EDP	38	44	6	0	6
Purchasing Agents &/or Buyers	30	35	5	4	9
Accountants & Auditors	69	81	12	10	22
Caseworkers	208	243	35	42	77
Chiropractors	2	2	0	0	0
Clergy	25	29	4	4	8
Dentists	19	22	3	0	3
Dietitians &/or Nutritionists	76	89	13	19	32
Lawyers	4	5	1	0	1
Librarians, Professional	29	34	5	8	13
Nurses, Professional	5,614	6,561	947	1,353	2,300
Occupational Therapists	51	60	9	8	17
Personnel & Labor Relations Specialists	66	77	11	8	19
Pharmacists	175	204	29	33	62
Physical Therapists	131	153	22	23	45
Physicians &/or Surgeons	537	628	91	67	158
Podiatrists	18	21	3	4	7
All Other Therapists	19	22	3	4	7
Manual-Arts, Music, &/or Recreational Therapists	15	18	3	4	7
Speech Pathologists &/or Audiologists	23	27	4	4	8
Audiometrists	1	1	0	0	0
Respiratory Therapists	311	363	52	56	108
All Other Professional Workers	245	286	41	37	78
TOTAL TECHNICAL WORKERS	3,800	4,441	641	1,053	1,694
Computer Programmers	13	15	2	0	2
Drafters	2	2	0	0	0
Electrical & Electronic Technicians	24	28	4	0	4
All Other Engineering Technicians	11	13	2	0	2
Biological Science Technicians	14	16	2	0	2
All Other Science Technicians	128	150	22	12	34
Dental Assistants	34	40	6	12	18
Licensed Practical Nurses	1,336	1,562	226	374	600
Physician's Assistants	11	13	2	4	6
Orthopists	1	1	0	0	0
Surgical Technicians	174	203	29	29	58
Radiologic Technicians	152	178	26	30	56
Pharmacy Helpers	133	155	22	34	56
Medical-Records Librarians	69	81	12	22	34
Dental Hygienists	4	5	1	0	1
Medical Laboratory Technologists	399	466	67	86	153
Biochemistry Technologists	26	30	4	4	8
Microbiology Technologists	38	44	6	8	14
Cytotechnologists	7	8	1	0	1

CURRENT AND PROJECTED ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

MARICOPA COUNTY (Continued)

	Estimated 1980 Employment	Projected 1984 Employment	Job Openings Due to Growth 1980-1984	Job Openings Due to Separations 1980-1984	Total Job Openings 1980-1984
Histologic Technologists	39	46	7	8	15
Medical Laboratory Technicians	159	186	27	40	67
Electrocardiograph Technicians	126	147	21	20	41
Electroencephalograph Technicians	25	29	4	4	8
Dietetic Technicians	73	85	12	43	55
Blood Bank Technology Specialists	25	29	4	7	11
Physical Therapy Assistants	118	140	22	30	52
Radiologic &/or Nuclear Medical Technologists	245	286	41	62	103
All Other Medical & Dental Techs.	370	432	62	220	282
All Other Technicians	44	51	7	4	11
TOTAL SERVICE WORKERS	4,827	5,666	839	1,088	1,927
Maids	661	776	115	188	303
All Other Janitors, Porters, & Cleaners	197	231	34	31	65
Guards & Doorkeepers	165	194	29	8	37
Bakers, Bread &/or Pastry	10	12	2	2	4
Dining Room Attendants	7	8	1	0	1
Kitchen Helpers	333	391	58	69	127
Waiters/Waitresses	5	6	1	0	1
Counter Attendants, Cafeteria	48	56	8	12	20
Cooks, Short Order &/or Specialty Fast Foods	49	58	9	8	17
Pantry, Sandwich &/or Coffee Makers	37	43	6	8	14
Cooks, Institution	120	141	21	20	41
All Other Food Service Workers	355	417	62	74	136
Supervisors, Nonworking -- Service Only	147	173	26	12	38
Housekeepers	103	121	18	24	42
Nurse's Aides &/or Orderlies	2,069	2,427	358	506	864
Psychiatric Aides	211	248	37	52	89
Orthopedic-Cast Specialists	8	9	1	0	1
Child-Care Workers	26	31	5	8	13
Social Service Aides	35	41	6	8	14
Medical Assistants	15	18	3	4	7
Occupational Therapy Assistants	111	130	19	28	47
All Other Service Workers	115	135	20	26	46
TOTAL MAINTENANCE & PRODUCTION WORKERS	871	1,005	134	105	239
Mechanics, Automotive	2	2	0	0	0
Electromedical Equipment Repairers	28	32	4	1	5
Mechanics, Maintenance	27	31	4	0	4
All Other Mechanics and Repairers	21	24	3	0	3
Washers &/or Starchers, Machine	37	43	6	9	15
Laundry Pressers, Machine	186	216	30	47	77
Truck Drivers	4	5	1	0	1
Carpenters	35	40	5	4	9
Delivery &/or Route Workers	15	17	2	0	2
Electricians	36	42	6	4	10
Supervisors, Nonworking	52	60	8	4	12
Inspectors	1	1	0	0	0
Maintenance Repairers, General Utility	173	200	27	12	39
Helpers, Trades	16	18	2	0	2
Order Fillers	1	1	0	0	0
Painters, Maintenance	27	31	4	4	8
Plumbers &/or Pipefitters	17	20	3	0	3
Custom Sewers	4	5	1	0	1
Stationary Boiler Firers	8	9	1	0	1
Stationary Engineers	79	91	12	8	20
Opticians, Dispensing &/or Optical Mechanics	1	1	0	0	0
Gardeners and Groundskeepers	29	33	4	4	8
Ambulance Drivers &/or Attendants	24	28	4	4	8
All Other Skilled Craft Workers	7	8	1	0	1
All Other Operatives & Semiskilled Workers	35	40	5	4	9
All Other Laborers & Unskilled Workers	6	7	1	0	1

CURRENT AND PROJECTED ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

MARICOPA COUNTY (Continued)

	Estimated 1980 Employment	Projected 1984 Employment	Job Openings Due to Growth 1980-1984	Job Openings Due to Separations 1980-1984	Total Job Openings 1980-1984
TOTAL CLERICAL WORKERS	4,108	4,728	620	1,016	1,636
Bookkeeping &/or Billing Machine Operators	17	20	3	4	7
Computer Operators	59	68	9	8	17
Keypunch Operators	86	99	13	22	35
Peripheral EDP Equipment Operators	10	12	2	4	6
All Other Office Machine Operators	14	16	2	4	6
Stenographers	238	274	36	61	97
Accounting Clerks	135	155	20	31	51
Bookkeepers, Hand	42	48	6	10	16
Cashiers	83	96	13	20	33
File Clerks	192	221	29	60	89
General Clerks, Office	583	671	88	141	229
Library Assistants	6	7	1	0	1
Insurance Clerks, Medical	259	298	39	63	102
Order Clerks	17	20	3	4	7
Payroll &/or Timekeeping Clerks	26	30	4	4	8
Personnel Clerks	41	47	6	13	19
Procurement Clerks	13	15	2	0	2
Receptionists	226	260	34	71	105
Secretaries	583	671	88	160	248
Statistical Clerks	84	97	13	20	33
Switchboard Operators	150	173	23	47	70
Switchboard Operators/Receptionists	32	37	5	9	14
Typists	184	212	28	56	84
Clerical Supervisors	150	173	23	19	42
All Other Office Clerical Workers	673	778	105	164	269
Production Clerks &/or Coordinators	28	32	4	4	8
Shipping Packers	37	43	6	4	10
Shipping &/or Receiving Clerks	32	37	5	4	9
Stock Clerks, Stockroom	78	90	12	8	20
Dispatchers, Ambulance	14	16	2	1	3
All Other Plant Clerical Workers	16	18	2	0	2
TOTAL SALES WORKERS	13	15	2	0	2
Sales Representatives	1	1	0	0	0
Sales Clerks	12	14	2	0	2
TOTAL ALL OCCUPATIONS	22,469	26,190	3,721	5,086	8,807

CURRENT AND PROJECTED ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

MOHAVE COUNTY

	Estimated 1980 Employment	Projected 1984 Employment	Job Openings Due to Growth 1980-1984	Job Openings Due to Separations 1980-1984	Total Job Openings 1980-1984
TOTAL MANAGERS & OFFICERS	17	19	22	4	6
TOTAL PROFESSIONAL WORKERS	117	133	16	24	40
Purchasing Agents &/or Buyers	3	3	0	0	0
Accountants & Auditors	1	1	0	0	0
Caseworkers	1	1	0	0	0
Dietitians &/or Nutritionists	2	2	0	0	0
Librarians, Professional	1	1	0	0	0
Nurses, Professional	83	96	13	20	33
Personnel & Labor Relations Specialists	2	2	0	0	0
Pharmacists	5	6	1	0	1
Physical Therapists	3	3	0	0	0
Respiratory Therapists	14	16	2	4	6
All Other Professional Workers	2	2	0	0	0
TOTAL TECHNICAL WORKERS	95	108	13	16	29
Biological Science Technicians	2	2	0	0	0
Licensed Practical Nurses	44	51	7	12	19
Surgical Technicians	7	8	1	0	1
Radiologic Technicians	8	9	1	0	1
Pharmacy Helpers	5	6	1	0	1
Medical-Records Librarians	2	2	0	0	0
Medical Laboratory Technologists	13	15	2	4	6
Microbiology Technologists	1	1	0	0	0
Histologic Technologists	1	1	0	0	0
Electrocardiograph Technicians	3	3	0	0	0
Dietetic Technicians	2	2	0	0	0
Physical Therapy Assistants	3	3	0	0	0
Radiologic &/or Nuclear Medical Technologists	4	5	1	0	1
TOTAL SERVICE WORKERS	157	179	22	32	54
Maids	18	21	3	4	7
All Other Janitors, Porters, & Cleaners	2	2	0	0	0
Kitchen Helpers	37	42	5	8	13
Cooks, Institution	10	11	1	0	1
Supervisors, Nonworking -- Service Only	7	8	1	0	1
Housekeepers	14	16	2	4	6
Nurse's Aides &/or Orderlies	69	79	10	16	26
TOTAL MAINTENANCE & PRODUCTION WORKERS	37	42	5	0	5
Electromedical Equipment Repairers	1	1	0	0	0
Washers &/or Starchers, Machine	9	10	1	0	1
Supervisors, Nonworking	1	1	0	0	0
Maintenance Repairers, General Utility	5	6	1	0	1
Painters, Maintenance	1	1	0	0	0
Stationary Boiler Firers	6	7	1	0	1
Stationary Engineers	1	1	0	0	0
Gardeners & Groundskeepers	3	3	0	0	0
Ambulance Drivers &/or Attendants	9	11	2	0	2
All Other Operatives & Semiskilled Workers	1	1	0	0	0
TOTAL CLERICAL WORKERS	95	107	12	15	27
Computer Operators	5	6	1	0	1
Stenographers	2	2	0	0	0
Accounting Clerks	1	1	0	0	0
File Clerks	2	2	0	0	0
General Clerks, Office	14	16	2	4	6
Library Assistants	2	2	0	0	0
Insurance Clerks, Medical	17	19	2	4	6
Order Clerks	4	5	1	0	1
Payroll &/or Timekeeping Clerks	3	3	0	0	0

CURRENT AND PROJECTED ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

MOHAVE COUNTY (Continued)

	Estimated 1980 Employment	Projected 1984 Employment	Job Openings Due to Growth 1980-1984	Job Openings Due to Separations 1980-1984	Total Job Openings 1980-1984
Procurement Clerks	6	7	1	0	1
Receptionists	4	5	1	0	1
Secretaries	5	6	1	0	1
Statistical Clerks	5	6	1	0	1
Switchboard Operators/Receptionists	20	22	2	7	9
Typists	1	1	0	0	0
Clerical Supervisors	2	2	0	0	0
Stock Clerks, Stockroom	2	2	0	0	0
TOTAL ALL OCCUPATIONS	518	588	70	91	161

CURRENT AND PROJECTED ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

NAVAJO COUNTY

	Estimated 1980 Employment	Projected 1984 Employment	Job Openings Due to Growth 1980-1984	Job Openings Due to Separations 1980-1984	Total Job Openings 1980-1984
TOTAL MANAGERS & OFFICERS	8	9	1	0	1
TOTAL PROFESSIONAL WORKERS	69	79	10	12	22
Purchasing Agents &/or Buyers	3	3	0	0	0
Accountants & Auditors	1	1	0	0	0
Caseworkers	1	1	0	0	0
Dietitians &/or Nutritionists	4	5	1	0	1
Librarians, Professional	1	1	0	0	0
Nurses, Professional	53	62	9	12	21
Pharmacists	3	3	0	0	0
Respiratory Therapists	3	3	0	0	0
TOTAL TECHNICAL WORKERS	37	42	5	4	9
Licensed Practical Nurses	9	10	1	4	5
Surgical Technicians	6	7	1	0	1
Radiologic Technicians	2	2	0	0	0
Medical-Records Librarians	4	5	1	0	1
Medical Laboratory Technologists	1	1	0	0	0
Medical Laboratory Technicians	5	6	1	0	1
Electrocardiograph Technicians	1	1	0	0	0
Dietetic Technicians	2	2	0	0	0
Radiologic &/or Nuclear Medical Technologists	4	5	1	0	1
All Other Medical & Dental Techs.	3	3	0	0	0
TOTAL SERVICE WORKERS	71	80	9	12	21
Maids	11	12	1	4	5
All Other Janitors, Porters & Cleaners	1	1	0	0	0
Guards & Doorkeepers	1	1	0	0	0
Kitchen Helpers	9	10	1	0	1
Cooks, Institution	11	12	1	0	1
Housekeepers	1	1	0	0	0
Nurse's Aides &/or Orderlies	37	43	6	8	14
TOTAL MAINTENANCE & PRODUCTION WORKERS	6	7	1	0	1
Maintenance Repairers, General Utility	6	7	1	0	1
TOTAL CLERICAL WORKERS	40	45	5	0	5
Bookkeeping &/or Billing Machine Operators	3	3	0	0	0
Stenographers	1	1	0	0	0
Accounting Clerks	2	2	0	0	0
Bookkeepers, Hand	1	1	0	0	0
General Clerks, Office	3	3	0	0	0
Insurance Clerks, Medical	3	4	1	0	1
Payroll &/or Timekeeping Clerks	2	2	0	0	0
Receptionists	2	2	0	0	0
Secretaries	2	2	0	0	0
Statistical Clerks	1	1	0	0	0
Switchboard Operators	2	2	0	0	0
Switchboard Operators/Receptionists	7	8	1	0	1
Typists	1	1	0	0	0
Clerical Supervisors	1	1	0	0	0
All Other Office Clerical Workers	9	12	3	0	3
TOTAL ALL OCCUPATIONS	231	262	31	28	59

CURRENT AND PROJECTED ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

PINAL COUNTY

	Estimated 1980 Employment	Projected 1984 Employment	Job Openings Due to Growth 1980-1984	Job Openings Due to Separations 1980-1984	Total Job Openings 1980-1984
TOTAL MANAGERS & OFFICERS	11	12	1	0	1
TOTAL PROFESSIONAL WORKERS	83	94	11	16	27
Industrial Engineers	1	1	0	0	0
Purchasing Agents &/or Buyers	2	2	0	0	0
Accountants & Auditors	2	2	0	0	0
Caseworkers	2	2	0	0	0
Dietitians &/or Nutritionists	2	2	0	0	0
Nurses, Professional	66	76	10	16	26
Occupational Therapists	1	1	0	0	0
Personnel & Labor Relations Specialists	1	1	0	0	0
Pharmacists	4	5	1	0	1
Physical Therapists	1	1	0	0	0
All Other Professional Workers	1	1	0	0	0
TOTAL TECHNICAL WORKERS	68	78	10	12	22
Licensed Practical Nurses	42	49	7	12	19
Surgical Technicians	2	2	0	0	0
Radiologic Technicians	4	5	1	0	1
Pharmacy Helpers	3	3	0	0	0
Medical-Records Librarians	2	2	0	0	0
Medical Laboratory Technologists	6	7	1	0	1
Microbiology Technologists	1	1	0	0	0
Medical Laboratory Technicians	4	5	1	0	1
Electrocardiograph Technicians	3	3	0	0	0
Electroencephalograph Technicians	1	1	0	0	0
TOTAL SERVICE WORKERS	164	187	23	32	55
Maids	26	30	4	8	12
All Other Janitors, Porters, & Cleaners	7	8	1	0	1
Guards & Doorkeepers	1	1	0	0	0
Dining Room Attendants	3	3	0	0	0
Kitchen Helpers	18	21	3	4	7
Cooks, Institution	7	8	1	0	1
All Other Food Service Workers	2	2	0	0	0
Supervisors, Nonworking -- Service Only	2	2	0	0	0
Housekeepers	2	2	0	0	0
Nurse's Aides &/or Orderlies	87	100	13	20	33
Psychiatric Aides	7	8	1	0	1
Social Service Aides	1	1	0	0	0
Medical Assistants	1	1	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	16	18	2	0	2
Washers &/or Starchers, Machine	2	2	0	0	0
Maintenance Repairers, General Utility	6	6	0	0	0
Stationary Boiler Firers	4	5	1	0	1
Gardeners & Groundskeepers	4	5	1	0	1
TOTAL CLERICAL WORKERS	79	89	10	8	18
Bookkeeping &/or Billing Machine Operators	1	1	0	0	0
Keypunch Operators	2	2	0	0	0
Stenographers	11	12	1	4	5
Accounting Clerks	2	2	0	0	0
Bookkeepers, Hand	1	1	0	0	0
Cashiers	3	3	0	0	0
File Clerks	4	5	1	0	1
General Clerks, Office	1	1	0	0	0
Insurance Clerks, Medical	7	8	1	0	1
Payroll &/or Timekeeping Clerks	2	2	0	0	0
Personnel Clerks	2	2	0	0	0
Procurement Clerks	4	5	1	0	1

CURRENT AND PROJECTED ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

PINAL COUNTY (Continued)

	Estimated 1980 Employment	Projected 1984 Employment	Job Openings Due to Growth 1980-1984	Job Openings Due to Separations 1980-1984	Total Job Openings 1980-1984
Receptionists	4	5	1	0	1
Secretaries	4	5	1	0	1
Statistical Clerks	1	1	0	0	0
Switchboard Operators	4	5	1	0	1
Switchboard Operators/Receptionists	3	3	0	0	0
Typists	1	1	0	0	0
Clerical Supervisors	1	1	0	0	0
All Other Office Clerical Workers	15	18	3	4	7
Shipping Packers	2	2	0	0	0
Shipping &/or Receiving Clerks	3	3	0	0	0
Stock Clerks, Stockroom	1	1	0	0	0
TOTAL ALL OCCUPATIONS	421	478	57	68	125

CURRENT AND PROJECTED ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

PIMA COUNTY

	Estimated 1980 Employment	Projected 1984 Employment	Job Openings Due to Growth 1980-1984	Job Openings Due to Separations 1980-1984	Total Job Openings 1980-1984
TOTAL MANAGERS & OFFICERS	385	438	53	47	100
TOTAL PROFESSIONAL WORKERS	2,785	3,191	406	596	1,002
Electrical & Electronic Engineers	6	7	1	0	1
Statisticians	2	2	0	0	0
Biological Scientists	3	3	0	0	0
Medical Scientists	8	9	1	0	1
Psychologists	7	8	1	0	1
All Other Social Scientists	1	1	0	0	0
Systems Analysts, EDP	2	2	0	0	0
Purchasing Agents &/or Buyers	7	8	1	0	1
Accountants & Auditors	13	15	2	2	4
Caseworkers	56	64	8	12	20
Clergy	5	6	1	0	1
Dietitians &/or Nutritionists	30	34	4	8	12
Librarians, Professional	21	24	3	4	7
Nurses, Professional	2,013	2,309	296	480	776
Occupational Therapists	12	14	2	4	6
Personnel & Labor Relations Specialists	14	16	2	0	2
Pharmacists	91	104	13	16	29
Physical Therapists	44	50	6	8	14
Physicians &/or Surgeons	244	280	36	30	66
All Other Therapists	8	9	1	0	1
Manual-Arts, Music &/or Recreational Therapists	8	9	1	0	1
Speech Pathologists &/or Audiologists	10	11	1	0	1
Audiometrists	1	1	0	0	0
Respiratory Therapists	157	180	23	28	51
All Other Professional Workers	22	25	3	4	7
TOTAL TECHNICAL WORKERS	1,343	1,538	195	360	555
Computer Programmers	2	2	0	0	0
Electrical & Electronic Technicians	9	10	1	0	1
All Other Engineering Technicians	3	3	0	0	0
Biological Science Technicians	20	23	3	2	5
Dental Assistants	5	6	1	0	1
Licensed Practical Nurses	422	484	62	118	180
Physician's Assistants	1	1	0	0	0
Orthopists	1	1	0	0	0
Surgical Technicians	88	101	13	14	27
Radiologic Technicians	91	104	13	17	30
Pharmacy Helpers	90	103	13	22	35
Medical-Records Librarians	8	9	1	4	5
Medical Laboratory Technologists	207	237	30	45	75
Biochemistry Technologists	15	17	2	4	6
Microbiology Technologists	21	24	3	4	7
Cytotechnologists	8	9	1	0	1
Histologic Technologists	17	19	2	4	6
Prosthetists - Orthotists	1	1	0	0	0
Medical Laboratory Technicians	19	22	3	4	7
Electrocardiograph Technicians	31	36	5	4	9
Electroencephalograph Technicians	18	21	3	4	7
Dietetic Technicians	12	14	2	8	10
Blood Bank Technology Specialists	13	15	2	4	6
Physical Therapy Assistants	54	62	8	13	21
Radiologic &/or Nuclear Medical Technologists	62	71	9	16	25
All Other Medical & Dental Techs.	124	142	18	73	91
All Other Technicians	1	1	0	0	0
TOTAL SERVICE WORKERS	2,001	2,302	301	446	747
Maids	427	491	64	118	182
All Other Janitors, Porters, & Cleaners	32	37	5	4	9

CURRENT AND PROJECTED ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

PIMA COUNTY (Continued)

	Estimated 1980 Employment	Projected 1984 Employment	Job Openings Due to Growth 1980-1984	Job Openings Due to Separations 1980-1984	Total Job Openings 1980-1984
Guards & Doorkeepers	33	38	5	0	5
Bakers, Bread &/or Pastry	6	7	1	0	1
Dining Room Attendants	63	72	9	4	13
Kitchen Helpers	101	116	15	20	35
Counter Attendants, Cafeteria	48	55	7	12	19
Pantry, Sandwich &/or Coffee Makers	9	10	1	0	1
Cooks, Institution	58	67	9	9	18
All Other Food Service Workers	125	144	19	26	45
Supervisors, Nonworking -- Service Only	22	25	3	0	3
Housekeepers	20	23	3	4	7
Nurse's Aides &/or Orderlies	818	942	124	197	321
Psychiatric Aides	51	59	8	12	20
Orthopedic-Cast Specialists	4	5	1	0	1
Social Service Aides	9	10	1	0	1
Medical Assistants	33	38	5	8	13
Occupational Therapy Assistants	1	1	0	0	0
All Other Service Workers	141	162	21	32	53
TOTAL MAINTENANCE & PRODUCTION WORKERS	326	369	43	30	73
Mechanics, Automotive	3	3	0	0	0
Electromedical Equipment Repairers	10	11	1	0	1
Mechanics, Maintenance	15	17	2	0	2
Washers &/or Starchers, Machine	15	17	2	4	6
Laundry Pressers, Machine	24	27	3	7	10
Truck Drivers	1	1	0	0	0
Carpenters	12	14	2	0	2
Delivery &/or Route Workers	3	3	0	0	0
Electricians	12	14	2	0	2
Supervisors, Nonworking	17	19	2	0	2
Maintenance Repairers, General Utility	15	17	2	0	2
Helpers, Trades	20	23	3	1	4
Order Fillers	1	1	0	0	0
Painters, Maintenance	11	12	1	0	1
Plumbers &/or Pipefitters	8	9	1	0	1
Custom Sewers	1	1	0	0	0
Stationary Boiler Firers	6	7	1	0	1
Stationary Engineers	25	28	3	4	7
Gardeners & Groundskeepers	17	19	2	4	6
All Other Operatives & Semiskilled Workers	89	102	13	8	21
All Other Laborers & Unskilled Workers	21	24	3	2	5
TOTAL CLERICAL WORKERS	1,513	1,708	195	365	560
Bookkeeping &/or Billing Machine Operators	4	5	1	0	1
Computer Operators	14	16	2	0	2
Keypunch Operators	45	51	6	12	18
All Other Office Machine Operators	9	10	1	4	5
Stenographers	79	89	10	20	30
Accounting Clerks	36	41	5	8	13
Bookkeepers, Hand	3	3	0	0	0
Cashiers	26	29	3	6	9
File Clerks	103	116	13	32	45
General Clerks, Office	284	321	37	68	105
Library Assistants	9	10	1	4	5
Insurance Clerks, Medical	121	137	16	29	45
Order Clerks	32	36	4	8	12
Payroll &/or Timekeeping Clerks	20	22	2	4	6
Personnel Clerks	20	22	2	8	10
Procurement Clerks	11	12	1	0	1
Receptionists	46	52	6	15	21
Secretaries	122	138	16	33	49
Statistical Clerks	18	20	2	4	6

CURRENT AND PROJECTED ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

PIMA COUNTY (Continued)

	Estimated 1980 Employment	Projected 1984 Employment	Job Openings Due to Growth 1980-1984	Job Openings Due to Separations 1980-1984	Total Job Openings 1980-1984
Switchboard Operators	53	60	7	16	23
Switchboard Operators/Receptionists	5	6	1	0	1
Typists	93	105	12	28	40
Clerical Supervisors	72	81	9	8	17
All Other Office Clerical Workers	169	191	22	41	63
Production Clerks &/or Coordinators	1	1	0	0	0
Shipping Packers	4	5	1	0	1
Shipping &/or Receiving Clerks	23	26	3	1	4
Stock Clerks, Stockroom	37	42	5	4	9
All Other Plant Clerical Workers	54	61	7	12	19
TOTAL ALL OCCUPATIONS	8,353	9,546	1,193	1,844	3,037

CURRENT AND PROJECTED ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

SANTA CRUZ COUNTY

	Estimated 1980 Employment	Projected 1984 Employment	Job Openings Due to Growth 1980-1984	Job Openings Due to Separations 1980-1984	Total Job Openings 1980-1984
TOTAL MANAGERS & OFFICERS	2	2	0	0	0
TOTAL PROFESSIONAL WORKERS	26	30	4	4	8
Purchasing Agents &/or Buyers	1	1	0	0	0
Accountants & Auditors	1	1	0	0	0
Caseworkers	1	1	0	0	0
Dietitians &/or Nutritionists	1	1	0	0	0
Nurses, Professional	19	23	4	4	8
Pharmacists	1	1	0	0	0
Manual-Arts, Music, &/or Recreational Therapists	2	2	0	0	0
TOTAL TECHNICAL WORKERS	16	18	2	0	2
Licensed Practical Nurses	4	5	1	0	1
Surgical Technicians	4	5	1	0	1
Radiologic Technicians	2	2	0	0	0
Medical-Records Librarians	1	1	0	0	0
Medical Laboratory Technologists	3	3	0	0	0
Medical Laboratory Technicians	1	1	0	0	0
Physical Therapy Assistants	1	1	0	0	0
TOTAL SERVICE WORKERS	58	67	9	14	23
Guards & Doorkeepers	6	7	1	0	1
Kitchen Helpers	10	12	2	4	6
Cooks, Institution	2	2	0	0	0
Nurse's Aides &/or Orderlies	40	46	6	10	16
TOTAL MAINTENANCE & PRODUCTION WORKERS	3	3	0	0	0
Truck Drivers	1	1	0	0	0
Maintenance Repairers, General Utility	2	2	0	0	0
TOTAL CLERICAL WORKERS	19	21	2	0	2
Bookkeeping &/or Billing Machine Operators	1	1	0	0	0
Cashiers	2	2	0	0	0
File Clerks	2	2	0	0	0
General Clerks, Office	5	7	2	0	2
Insurance Clerks, Medical	1	1	0	0	0
Payroll &/or Timekeeping Clerks	1	1	0	0	0
Personnel Clerks	1	1	0	0	0
Secretaries	2	2	0	0	0
Switchboard Operators/Receptionists	2	2	0	0	0
Clerical Supervisors	1	1	0	0	0
Stock Clerks, Stockroom	1	1	0	0	0
TOTAL ALL OCCUPATIONS	124	141	17	18	35

CURRENT AND PROJECTED ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

YAVAPAI COUNTY

	Estimated 1980 Employment	Projected 1984 Employment	Job Openings Due to Growth 1980-1984	Job Openings Due to Separations 1980-1984	Total Job Openings 1980-1984
TOTAL MANAGERS & OFFICERS	26	30	4	4	8
TOTAL PROFESSIONAL WORKERS	171	194	23	33	56
Mechanical Engineers	1	1	0	0	0
Medical Scientists	1	1	0	0	0
Psychologists	1	1	0	0	0
Systems Analysts, EDP	1	1	0	0	0
Purchasing Agents &/or Buyers	2	2	0	0	0
Accountants & Auditors	1	1	0	0	0
Caseworkers	2	2	0	0	0
Clergy	1	1	0	0	0
Dietitians &/or Nutritionists	2	2	0	0	0
Nurses, Professional	140	161	21	33	54
Personnel & Labor Relations Specialists	1	1	0	0	0
Pharmacists	6	7	1	0	1
Physical Therapists	3	3	0	0	0
All Other Therapists	1	1	0	0	0
Manual-Arts, Music, &/or Recreational Therapists	1	1	0	0	0
Respiratory Therapists	7	8	1	0	1
TOTAL TECHNICAL WORKERS	107	122	15	14	29
All Other Engineering Technicians	4	5	1	0	1
Licensed Practical Nurses	37	42	5	10	15
Surgical Technicians	7	8	1	0	1
Radiologic Technicians	5	6	1	0	1
Pharmacy Helpers	4	5	1	0	1
Medical-Records Librarians	6	7	1	0	1
Medical Laboratory Technologists	10	11	1	0	1
Microbiology Technologists	5	6	1	0	1
Histologic Technologists	1	1	0	0	0
Medical Laboratory Technicians	2	2	0	0	0
Electrocardiograph Technicians	2	2	0	0	0
Dietetic Technicians	3	3	0	0	0
Blood Bank Technology Specialists	2	2	0	0	0
Physical Therapy Assistants	5	6	1	0	1
Radiologic &/or Nuclear Medical Technologists	13	15	2	4	6
All Other Medical & Dental Techs.	1	1	0	0	0
TOTAL SERVICE WORKERS	173	198	25	29	54
Maids	35	40	5	8	13
All Other Janitors, Porters, & Cleaners	2	2	0	0	0
Guards & Doorkeepers	2	2	0	0	0
Dining Room Attendants	13	15	2	0	2
Kitchen Helpers	10	11	1	0	1
Counter Attendants, Cafeteria	4	5	1	0	1
Cooks, Institution	6	7	1	0	1
All Other Food Service Workers	5	6	1	0	1
Supervisors, Nonworking -- Service Only	2	2	0	0	0
Housekeepers	3	3	0	0	0
Nurse's Aides &/or Orderlies	91	105	14	21	35
TOTAL MAINTENANCE & PRODUCTION WORKERS	19	21	2	0	2
Electromedical Equipment Repairers	2	2	0	0	0
Laundry Pressers, Machine	4	4	0	0	0
Carpenters	1	1	0	0	0
Maintenance Repairers, General Utility	8	10	2	0	2
Order Fillers	1	1	0	0	0
Stationary Engineers	1	1	0	0	0
Gardeners & Groundskeepers	1	1	0	0	0
All Other Operatives & Semiskilled Workers	1	1	0	0	0

CURRENT AND PROJECTED ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

YAVAPAI COUNTY (Continued)

	Estimated 1980 Employment	Projected 1984 Employment	Job Openings Due to Growth 1980-1984	Job Openings Due to Separations 1980-1984	Total Job Openings 1980-1984
TOTAL CLERICAL WORKERS	106	119	13	17	30
Computer Operators	1	1	0	0	0
Keypunch Operators	3	3	0	0	0
Peripheral EDP Equipment Operators	4	5	1	0	1
Stenographers	9	10	1	4	5
Accounting Clerks	5	6	1	0	1
Bookkeepers, Hand	1	1	0	0	0
Cashiers	1	1	0	0	0
File Clerks	6	7	1	0	1
General Clerks, Office	4	4	0	0	0
Insurance Clerks, Medical	11	12	1	4	5
Order Clerks	7	8	1	0	1
Payroll &/or Timekeeping Clerks	1	1	0	0	0
Personnel Clerks	1	1	0	0	0
Procurement Clerks	1	1	0	0	0
Receptionists	4	4	0	0	0
Secretaries	7	8	1	0	1
Switchboard Operators	5	6	1	0	1
Switchboard Operators/Receptionists	4	4	0	0	0
Typists	18	20	2	5	7
All Other Office Clerical Workers	12	15	3	4	7
All Other Plant Clerical Workers	1	1	0	0	0
TOTAL SALES WORKERS	1	1	0	0	0
Sales Clerks	1	1	0	0	0
TOTAL ALL OCCUPATIONS	603	685	82	97	179

CURRENT AND PROJECTED ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

YUMA COUNTY

	Estimated 1980 Employment	Projected 1984 Employment	Job Openings Due to Growth 1980-1984	Job Openings Due to Separations 1980-1984	Total Job Openings 1980-1984
TOTAL MANAGERS & OFFICERS	3	3	0	0	0
TOTAL PROFESSIONAL WORKERS	186	212	26	39	65
Mechanical Engineers	2	2	0	0	0
Purchasing Agents &/or Buyers	2	2	0	0	0
Caseworkers	2	2	0	0	0
Clergy	3	3	0	0	0
Dietitians &/or Nutritionists	2	2	0	0	0
Librarians, Professional	1	1	0	0	0
Nurses, Professional	151	174	23	35	58
Personnel & Labor Relations Specialists	1	1	0	0	0
Pharmacists	4	5	1	0	1
Physical Therapists	2	2	0	0	0
Manual-Arts, Music, &/or Recreational Therapists	1	1	0	0	0
Respiratory Therapists	15	17	2	4	6
TOTAL TECHNICAL WORKERS	156	178	22	34	56
Computer Programmers	3	3	0	0	0
Licensed Practical Nurses	95	110	15	26	41
Surgical Technicians	6	7	1	0	1
Radiologic Technicians	8	9	1	0	1
Medical-Records Librarians	1	1	0	0	0
Medical Laboratory Technologists	14	16	2	4	6
Biochemistry Technologists	2	2	0	0	0
Microbiology Technologists	3	3	0	0	0
Histologic Technologists	2	2	0	0	0
Medical Laboratory Technicians	1	1	0	0	0
Electrocardiograph Technicians	4	5	1	0	1
Blood Bank Technology Specialists	1	1	0	0	0
Physical Therapy Assistants	1	1	0	0	0
Radiologic &/or Nuclear Medical Technologists	13	15	2	4	6
All Other Medical & Dental Techs.	2	2	0	0	0
TOTAL SERVICE WORKERS	236	270	34	49	83
Maids	41	47	6	12	18
All Other Janitors, Porters, & Cleaners	4	5	1	0	1
Guards & Doorkeepers	6	7	1	0	1
Dining Room Attendants	2	2	0	0	0
Kitchen Helpers	26	30	4	4	8
Cooks, Short Order &/or Specialty Fast Foods	3	3	0	0	0
Cooks, Institution	2	2	0	0	0
Supervisors, Nonworking -- Service	2	2	0	0	0
Housekeepers	1	1	0	0	0
Nurse's Aides &/or Orderlies	135	155	20	33	53
Psychiatric Aides	7	8	1	0	1
Orthopedic-Cast Specialists	6	7	1	0	1
Social Service Aides	1	1	0	0	0
TOTAL MAINTENANCE & PRODUCTION WORKERS	24	27	3	0	3
Laundry Pressers, Machine	4	5	1	0	1
Supervisors, Nonworking	3	3	0	0	0
Maintenance Repairers, General Utility	15	17	2	0	2
Gardeners & Groundskeepers	2	2	0	0	0
TOTAL CLERICAL WORKERS	188	210	22	37	59
Computer Operators	6	7	1	0	1
Keypunch Operators	4	4	0	0	0
Stenographers	2	2	0	0	0
Accounting Clerks	5	6	1	0	1
Bookkeepers, Hand	3	3	0	0	0
Cashiers	12	13	1	4	5

CURRENT AND PROJECTED ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

YUMA COUNTY (Continued)

	Estimated 1980 Employment	Projected 1984 Employment	Job Openings Due to Growth 1980-1984	Job Openings Due to Separations 1980-1984	Total Job Openings 1980-1984
General Clerks, Office	57	65	8	13	21
Insurance Clerks, Medical	15	17	2	4	6
Order Clerks	5	6	1	0	1
Payroll &/or Timekeeping Clerks	3	3	0	0	0
Personnel Clerks	5	6	1	0	1
Procurement Clerks	2	2	0	0	0
Secretaries	26	29	3	8	11
Statistical Clerks	9	10	1	0	1
Switchboard Operators	15	17	2	4	6
Typists	9	10	1	4	5
Clerical Supervisors	2	2	0	0	0
Shipping &/or Receiving Clerks	2	2	0	0	0
Stock Clerks, Stockroom	4	4	0	0	0
All Other Plant Clerical Workers	2	2	0	0	0
TOTAL ALL OCCUPATIONS	793	900	107	159	266

METHODOLOGY

Limitations of the Data

The projection methods do not account for cyclical, seasonal, and such external factors as sudden and large establishment openings or closings. The methodology also assumes that the labor market areas are self-contained and generally devoid of significant levels of commuting and migration from one area to another for employment.

The occupational data in this publication only refer to employees who earned a wage or salary. Self-employed and unpaid family workers are not represented in the statistics.

Sample Selection and Response Rate

Occupational estimates for the hospital industry were developed from a survey of hospitals throughout Arizona. Fifty-seven hospitals were surveyed and a usable response rate of 100.0 percent was attained. Hospitals administered by the federal government and those operated by firms primarily involved in other activities, i.e., mining, are not included.

Employment Projections

Hospital employment was projected using regression analysis and was adjusted to reflect recent industry developments. The 1984 occupational employment was calculated by applying adjusted staffing pattern ratios (as determined by the survey) to the industry projections. The adjustments to the ratio reflect national trends of evolving occupational distribution.[1]

Job Openings

The difference betweeen 1980 and 1984 employment for each occupation represents expected job openings due to growth. Job openings due to separations were calculated by interpolating 1970 and 1985 separation rates for each occupation[2] and applying them to the occupational employment projections. Total job openings is the sum of openings due to growth and separations.

---

[1] "Tomorrow's Manpower Needs," Vol. IV. BLS, Feb. 1971 pp. 108-110.

[2] "Tomorrow's Manpower Needs," Supplement No. 4, BLS, 1974, pp. 11-16.

LABOR MARKET INFORMATION PUBLICATIONS
OCCUPATIONAL EMPLOYMENT STATISTICS
BOX 6123, SITE CODE 920B
PHOENIX, ARIZONA 85005

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
EMPLOYMENT SECURITY MAIL
LAB 449

FIRST CLASS MAIL

In cooperation with the Bureau of Labor Statistics, U.S. Department of Labor. Preparation of this document was financed in part through the Comprehensive Employment and Training Act (P. L. 93-203), Governor's Special Grant, from the U.S. Department of Labor.

50465-2.16

FEBRUARY 1985

PA-332 (2-85)

Arizona Occupational Profile

A Labor Market Information Publication
of the Department of Economic Security

HOSPITALS

OCCUPATIONAL PROFILE

The value of current and accurate occupational employment information has long been recognized by job seekers, public and private administrators, and those involved in training, recruiting, and counseling. A major source of this information in Arizona is the Occupational Employment Statistics (OES) Program -- a cooperative effort between Arizona and the U. S. Bureau of Labor Statistics.

This Occupational Profile is one in a series of publications produced from information developed by the Occupational Employment Statistics survey. These publications represent one of several occupational employment information delivery systems incorporating OES survey data. The survey is used to collect employment data, by county, for over 700 occupations in Arizona. From these surveys, which require the cooperation of the Arizona business community, current employment in the various occupations is determined, and from this an occupational outlook is formulated. The Occupational Profiles contain the survey findings and examine, individually, the industries of Arizona.

Surveyed industries include:

Mining
Construction
Manufacturing
Transportation, Communications, and Public Utilities
Trade
Finance, Insurance, and Real Estate
Services
Government

For further information, or to comment on any aspect of this program, please write to the address on the back cover.

INDUSTRY INFORMATION

INDUSTRY DEFINITION

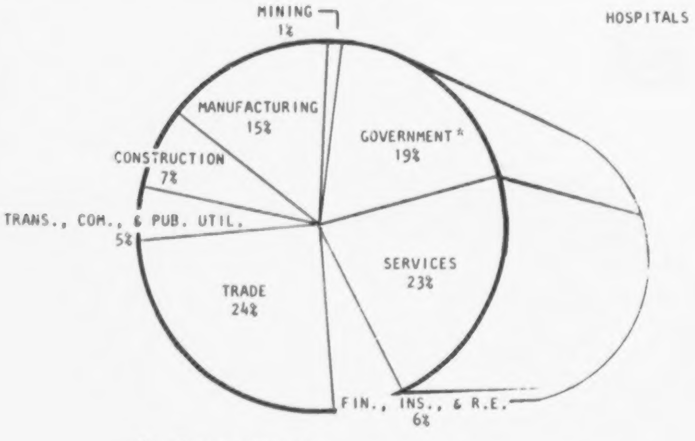
This industry group includes establishments primarily engaged in providing diagnostic services, extensive medical treatment including surgery, continuous nursing services, as well as education and research activities. These establishments have an organized medical staff, inpatient beds, and equipment and facilities to provide complete health care. Occupational employment information presented in this publication is based on data provided by each of the 91 hospitals operating in Arizona in May 1983. These hospitals can be categorized as general and surgical, psychiatric, or specialty hospitals, e.g., children's hospitals. Included within the scope of this publication are private hospitals, those administered by federal, state, and local governments, and those operated by firms identified with other industries, e.g., mining.

A detailed description of the hospital services industry is found in the Standard Industrial Classification (SIC) Manual[1] under industry code 806.

INDUSTRY CHARACTERISTICS

Employing more than half of the nearly 80,000 in Arizona's total health delivery system, hospitals are the largest employer of health workers in the state. Representing 4 percent of the state's workers, employment in Arizona's 91 hospitals averaged 47,000 in 1983. Most of the state's 91 hospitals were privately operated with the remainder administered by federal and local governments. Federal hospitals included 16 Public Health Service or Indian Hospitals, 4 military, and 3 Veteran's Administration facilities. State and local governments, on the other hand, administer eight of Arizona's hospitals. In the private sector, 3 hospitals were owned by mining companies.

FIGURE 1: ARIZONA NONAGRICULTURAL EMPLOYMENT, 1983



* includes education

---

[1] Office of management and Budget, *Standard Industrial Classification Manual, 1972 Edition*, p. 322.

Although in the midst of a period of rapid change and redefinition of roles, hospitals may still be regarded as belonging in one of three general categories: general, psychiatric, and specialty. General hospitals represent more than 90 percent of all hospitals in Arizona and employ approximately 95 percent of the industry's workers. These hospitals are primarily involved in rendering care for patients with medical conditions that require diagnosis and medical/surgical treatment involving patient stays of a few days to a few weeks.

Psychiatric hospitals are specialty establishments primarily involved with providing diagnostic services and inpatient treatment to the mentally ill. Because patients are often hospitalized for several weeks or more, these and other specialty hospitals are often referred to as "long-term" care facilities. The four psychiatric hospitals in Arizona employ less than five percent of the hospital workers in the state.

Specialty hospitals, except psychiatric, provide diagnostic and treatment services for specific conditions and diseases such as pregnancy; children's ailments; geriatric conditions; tuberculosis; and eye, ear, nose, and throat diseases. In 1983, employment totaled nearly 400 in Arizona's two specialty hospitals which are both located in Phoenix.

Hospital employment is concentrated in metropolitan areas, and its geographic distribution is similar to that of total Arizona employment. The number of hospitals, however, is divided equally between the metropolitan and rural counties. Approximately half of all Arizona hospitals are located outside of Maricopa and Pima counties, yet they employ only 13 percent of Arizona's hospital workers. Offering more specialized and a wider range of services, metropolitan hospitals average 820 employees as compared to 170 in their rural counterparts. All psychiatric and specialty hospitals are located in Maricopa and Pima counties.

FIGURE 2: HOSPITAL EMPLOYMENT
BY GEOGRAPHICAL AREA - MAY 1983

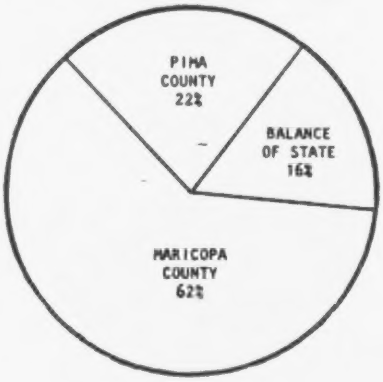


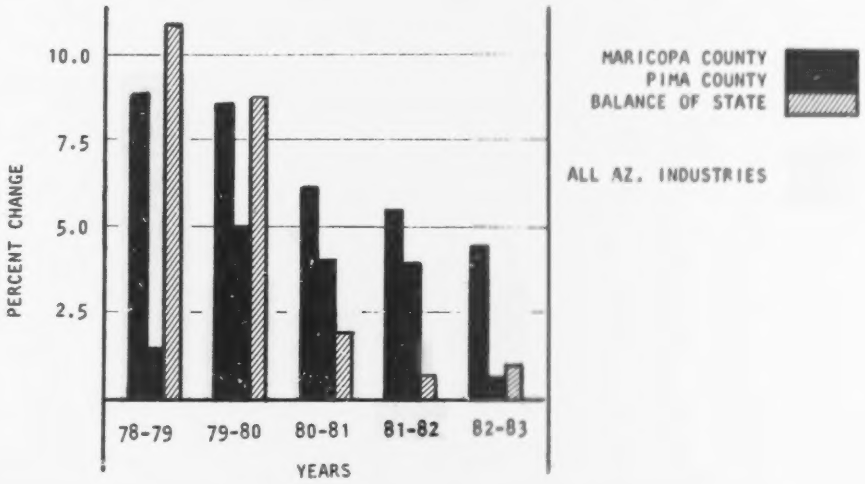
FIGURE 3: ARIZONA HOSPITALS AT A GLANCE
MAY 1983

COUNTY	NUMBER OF HOSPITALS	TOTAL EMPLOYMENT	HOSPITAL TYPE	OWNERSHIP
Apache	4	594	general	Private (2) Federal - Public Health Service (PHS) (2)
Cochise	6	857	general	Private (5) Federal - Army (1)
Coconino	4	944	general	Private (2) Federal - PHS (2)
Gila	4	580	general	Private (2) Federal - PHS (1) Local Government (1)
Graham	2	136	general	Private (1) Federal - PHS (1)
Greenlee	1	90	general	Private - Mining Industry
LaPaz	2	145	general	Private (1) Federal - PHS (1)
Maricopa	33	29,009	general (29) psych. (2) specialty (2) children's (1) research (1)	Private (25) Federal (5) Air Force (2) Veteran's Adm. (1) PHS (1) Inst. of Health (1) State & Local Govts. (3)
Mohave	3	492	general	Private (1) Federal - PHS (1) Local Government (1)
Navajo	6	613	general	Private (3) Federal - PHS (3)
Pima	14	10,511	general (12) psych. (2)	Private (9) Mining Industry (1) Federal (3) Air Force (1) Veteran's Adm. (1) PHS (1) State & Local Govts. (2)
Pinal	5	617	general	Private (3) Mining Industry (2) Federal - PHS (1) Local Govt. (1)
Santa Cruz	1	168	general	Private
Yavapai	3	1,189	general	Private (2) Federal - VA (1)
Yuma	3	920	general	Private (1) Federal - PHS (2)
STATEWIDE	91	46,865	general - 85 psych. - 4 specialty - 2	Private - 59 Federal - 24 State & Local Govts. - 8

INDUSTRY TRENDS

Hospital employment has shown consistent and rapid expansion in Arizona over the past two decades. For the 5-year period ending in 1983, hospital employment expanded by 11,000, or 30 percent, as compared to a 19 percent increase for total Arizona employment. Nationally, hospital employment increased nearly 20 percent for the period (compared to 4 percent for all industries) and distinguished the industry as one of the nation's fastest growing. General medical and surgical hospitals accounted for virtually all the employment growth in Arizona's hospitals while employment in psychiatric hospitals grew slightly and in specialty hospitals declined.

FIGURE 4: HOSPITAL EMPLOYMENT GROWTH RATES 1978 - 1983



The Phoenix metropolitan area has witnessed the most dramatic employment change as the number of workers in hospitals rose nearly 40 percent between 1978 and 1983. As significant as this growth rate is, it represents a moderation of expansion rates of the 1960s and 70s when hospital staffs were supplemented to service a burgeoning population. For the 5-year period ending in 1983, hospital employment in Pima county expanded 16 percent while hospital workers in the "balance of state" increased their numbers 25 percent.

In the coming years, employment growth in Arizona's hospitals will maintain its trend of increases. Projected increases, estimated at about 5 percent annually, will result primarily from the requirements of Arizona's expanding and aging population. However, the interplay of demographic, social, and economic factors will have an, as yet, largely undetermined effect on hospital employment levels in the future. Since 1965, the nation's consumer price index for medical care services has quadrupled and, indeed, inflation in medical care costs and broad-based efforts to contain these costs present the greatest uncertainties in the projection of medical services output and employment. Nationally, health care expenditures will rise from an estimated $355 billion in 1983 to $575 billion in 1988, an annual growth rate of 10.2 percent compared to a 13.4 percent annual rate between 1978 and 1983. This slower growth will result primarily from increased competition in the industry, a reduction in the overall inflation rate, and federal restrictions on payments to hospitals and physicians under the Tax and Equity Fiscal Responsibility Act of 1982.

To be sure, the hospital industry is in a period of transition -- adjusting to a variety of influences that include technological advances and a society that is helping to redefine the role of health services providers. These forces have contributed to the realization of a variety of fundamental changes in the industry. Changes in payment mechanisms, for example, and continued growth of health maintenance organizations will play a part in redefining hospital roles. Also, the greater reliance on home health care services is expected to both enhance patient care and offer hospitals cost-saving opportunities. Such trends will affect both the number and kinds of workers employed in hospitals.

Many industry representatives and analysts observe that, over the long term, hospitals will become more acute-care oriented. Mr. David Gyongyos, Human Resources Director at Scottsdale Memorial Health Services Co., Inc. feels this trend is already evident. "For example," says Mr. Gyongyos, "the performance of certain tests and treatments before hospitalization rather than during, and the release of certain patients a day earlier to rest at home is effectively shortening hospital stays." The continued growth of walk-in surgical centers, extended and out-patient care facilities, and home health care providers represents both a cause and result of the greater emphasis that hospitals are placing on acute care. These trends have already been manifested in the recently observed drop in the average length of a hospital stay.

Maricopa County will continue to register the largest increases as its share of Arizona's hospital employment expands. Compared to an expected increase of between 16 and 18 percent nationally, hospital employment in Maricopa County is predicted to expand 24 percent between 1983 and 1988. Hospital workers in Pima County and the "balance of state" are expected to increase their numbers 15 and 23 percent, respectively.

OCCUPATIONAL INFORMATION

Hospital employees are engaged in a broad range of medical and administrative activities requiring a variety of occupational skills. In addition to the medical personnel that we traditionally associate with this industry, hospitals also employ accountants and auditors, engineers, professional librarians, and other seemingly unrelated occupations. In some respects, the hospital resembles and incorporates activities usually found in commercial enterprises. In addition to the business, administrative, and service departments commonly found in commercial firms, the hospital often includes a power plant, dietary service, and maintenance staff.

Above all, however, the hospital brings together various types of personnel and facilities for specific lifesaving efforts and related public health, educational, and research activities. Although there is no typical hospital, each participates, to some degree, in all of the related activities. Hospital personnel must work, therefore, in an atmosphere of coordinated effort which reflects the breadth of hospital functions.

Although the hospital environment encompasses personnel with a variety of occupational skills, the bulk of hospital employment is in health-related occupations which are of a professional or technical nature. Led by 12,000 registered nurses, the "professional, paraprofessional, and technical workers" category accounts for more than 50 percent of the state's hospital employment. Along with registered nurses are a variety of other numerically prominent health practitioners that includes 3,000 licensed practical nurses, 1,300 physicians and surgeons, and 1,000 medical and clinical lab technologists.

FIGURE 5: OCCUPATIONS IN ARIZONA'S HOSPITALS
MAY 1983

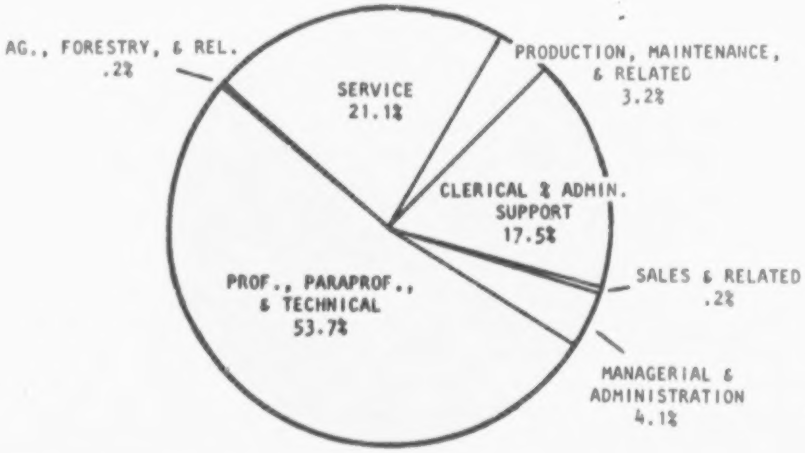


FIGURE 6: OCCUPATIONS WITH THE GREATEST
EMPLOYMENT IN ARIZONA'S HOSPITALS

	Employment 1983	Job Openings* 1983-1987
Registered Nurses	12,141	5,620
Nurse's Aides, Orderlies, & Attendants	3,275	1,530
Licensed Practical Nurses	3,041	1,540
Maids and Housekeeping Cleaners	1,551	778
Physicians & Surgeons	1,317	442
General Office Clerks	1,113	503
Medical & Clinical Lab Technologists	1,009	436
Secretaries (Exc. Medical)	874	449
Medical & Health Services Managers	820	328
Food Preparation Workers	776	332
Interviewing Clerks, Exc. Personnel & Social Welfare	714	304
Typists	644	339
Respiratory Therapists	632	247
Medical & Clinical Laboratory Technicians	601	239
Radiologic Technologists	569	237
Billing, Cost, & Rate Clerks	561	266
Medical Secretaries	526	269
Surgical Technicians	512	192
Pharmacists	486	190
Social Workers, Medical & Psychiatric	464	195
Food Servers, Exc. Restaurant	417	150
Medical Assistants	378	177
Cooks, Institution or Cafeteria	364	141
Stock Clerks - Stockroom, Warehouse, or Storage Yard	362	113
Janitors & Cleaners, Exc. Maids & Housekeeping	361	134
Medical Records Technicians & Technologists	360	199
First Line Supervisors & Managers - Clerical	352	123
Bookkeeping, Accounting, & Auditing Clerks	339	155
General Managers & Top Executives	331	108
Maintenance Repairers, General Utility	330	98
Pharmacy Assistants	284	129
Switchboard Operators	278	146
Physical Therapists	270	102
Radiologic Technicians	268	115
Housekeepers	268	101
Statistical Clerks	256	117
Guards	256	68

* Does not include turnover.

Service workers and clerical workers share most of the remaining 50 percent of hospital employment. Totaling nearly 10,000, the service worker category is dominated by nurse's aides and orderlies which number nearly 3,300, and maids and housekeeping cleaners with employment of 1,550.

Compared to hospitals across the country, those in Arizona have a higher percentage of professional and technical workers and a smaller percentage of service workers. Closer examination of professional workers employment data reveals that the staffing pattern (percentage) of registered nurses in Arizona's hospitals is 10 percent higher than the nation's. On the other hand, employment of licensed practical nurses and nurse's aides and orderlies (service occupations) is, on a percentage basis, appreciably lower in Arizona's hospitals.

A comparison of metropolitan hospital staffing patterns with their rural counterparts also reveals a notable difference. Outside Maricopa and Pima counties, hospitals tend to employ a greater number of workers in service occupations. Nursing aides, orderlies, and attendants account for 11 percent of the employment in rural hospitals -- nearly twice the ratio of these workers in Phoenix area hospitals.

Between 1983 and 1987, Arizona's hospital industry will provide jobseekers an estimated 10,000 new jobs as a result of industry growth. An additional 10,000 openings will transpire as workers leave the labor force and many more will be created as employees leave one job to take another.

Few jobseekers will find a greater number of opportunities than those aspiring to be registered nurses (RNs). The strong demand for registered nurses is, in part, a function of their training, which permits them to work effectively in a variety of roles and employment settings. More versatile than licensed practical nurses (LPNs), for example, RNs lend themselves to the needs of expanding intensive and special care facilities.

While many argue that the skills of registered nurses are becoming more specialized, a number of hospital administrators agree with Niki O'Keefe, Assistant Director of Employer Relations at St. Luke's Medical Center, that a broader perspective and a wider range of capabilities will enable RNs to work in different hospital environments. Whichever is the prevailing trend, the number of RNs will probably be affected favorably. Additionally, many RNs will be well suited for work in the emerging "alternative" delivery systems such as as ambulatory surgical clinics, freestanding emergency centers, and home-health systems.

FIGURE 7: IN 1980, TWO-THIRDS OF ALL REGISTERED NURSES IN THE U.S. WERE EMPLOYED IN HOSPITALS

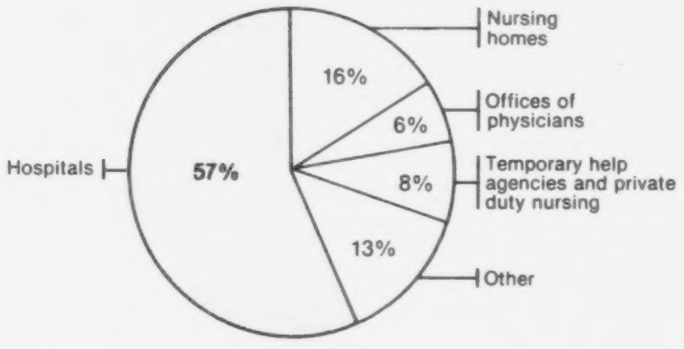
	Percent
Total	100.0
Hospitals	65.6
Nursing homes or long-term care facilities	8.0
Public or community health facilities	6.6
Physicians' or dentists' offices	5.7
Student health services	3.5
Occupational health facilities	2.3
Private duty nursing	1.6
Other	6.7

Source: U.S. Bureau of Labor Statistics

In addition to the many job opportunities created by a growing hospital industry is an even greater number created by turnover and workers leaving the labor force. Although registered nurses show a strong attachment to their field, their replacement requirements are, as with most other occupations, the greatest source of job openings.

For every four registered nurses working in Arizona's hospitals there is one licensed practical nurse (LPN). As with RNs, projecting employment for LPNs is complicated by the interrelationship of recent and expected trends in the health services delivery system. Again, changes in the system can be expected to cause changes in the mix of hospital patients. With the increasing emphasis on specialized and acute care, the expectation is that LPNs will lose some of their share of hospital employment to the more highly trained RNs. Because of shifting roles, however, it is expected that the lower demand for hospital LPNs will be offset by growing demand for LPNs in home health agencies, nursing homes, clinics, and other establishments assuming responsibilities formerly claimed by hospitals. It should be noted that the forces affecting medical services employment are evolutionary and the expected changes in the industry will not happen overnight. For the foreseeable future, hospitals will continue to provide the greatest number of opportunities for licensed practical nurses.

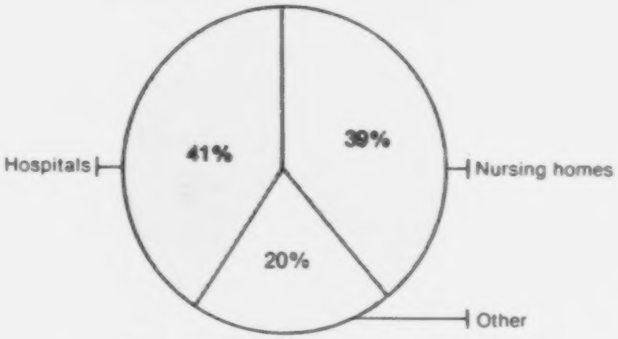
FIGURE 8: U.S. EMPLOYMENT DISTRIBUTION OF LICENSED PRACTICAL NURSES - 1982



SOURCE: Bureau of Labor Statistics

Nursing aides, orderlies, and attendants represent the second largest occupational category in hospitals. With employment of 3,300 in 1983, the number of nursing aides, orderlies, and attendants working in the industry will total approximately 4,000 by 1987. Opportunities will be plentiful due to the widespread availability of jobs and the relative ease of entry into the occupation. Replacement needs constitute the major source of job openings as turnover in these occupations is high. Although openings will be plentiful, employment of these workers is expected to grow more slowly in hospitals than in nursing homes through the mid-1990s.

FIGURE 9: U.S. EMPLOYMENT DISTRIBUTION OF NURSING AIDES, ORDERLIES, AND ATTENDANTS - 1982



SOURCE Bureau of Labor Statistics

Employment of medical technologists and technicians is expected to expand more rapidly than the average for all occupations. Even so, most openings for these workers will result from the need to replace those who transfer to other jobs or leave work altogether.

Few occupations reflect the impact of scientific advances as much as technical workers in hospitals. Computerized tomography (CT) and ultrasound scanners, nuclear magnetic resonance, and digital radiography for example, will be followed by new generations of devices and techniques requiring ever-changing skills.

Although a growing number of these workers will be employed in clinics, independent laboratories, public health agencies, and other environments, most health technicians and technologists will continue to be employed in hospitals. Expansion of preventative medicine and diagnostic techniques will strengthen demand for these workers. Changes in health care financing,

FIGURE 10: EMPLOYMENT IN SELECTED TECHNICAL OCCUPATIONS - MAY 1983

Occupation	Employment
Medical/Clinical Lab Technologists	1,009
Medical/Clinical Lab Technicians	601
Radiologic Technologists	569
Surgical Technician	512
Med. Records Technicians & Technologists	360
Electrocardiograph Techs.	159
Nuclear Medicine Technologists	129
Electroencephalograph Techs.	51
Dental Hygienists	50

however, may encourage hospitals to reduce certain of these services, but such cost containment efforts are not likely to appreciably suppress demand for technical workers.

Technological advances are also manifesting themselves in hospital offices where computers are enabling workers to attain unprecedented levels of efficiency. From intake to discharge, automated procedures are being incorporated, and the application of computer technology is nowhere more apparent than in many medical records offices. Medical records technicians and technologists with proficient skills and familiar with the latest coding and entry procedures will continue to be in strong demand.

FIGURE 11: CLERICAL OCCUPATIONS WITH THE GREATEST EMPLOYMENT IN HOSPITALS - MAY 1983

Occupation	Employment
General Office Clerks	1,113
Secretaries, Exc. Medical & Legal	874
Interviewing Clerks	714
Typists	644
Billing, Cost, & Rate Clerks	561
Medical Secretaries	526
Stock Clerks, Stkrm., Warehouse, Storage Yard	362
Managers & Supervisors - Clerical	352
Bookkeeping, Accounting, & Auditing Clerks	339

Despite automation of office procedures, clerical and administrative support occupations will increase their share of hospital employment. Rather than significantly suppressing employment levels in these occupations, automation is redefining many of the tasks performed by clerical personnel. General office clerks, interviewing clerks, typists, and billing clerks will see the greatest number of job openings during the projection period.

Planning, coordinating, and evaluating hospital activities are 1,900 managers and administrative personnel. Eighty percent of these workers are medical and health services managers, while most of the balance specialize in various other administrative functions. An increasingly complex health care system will require skilled health services managers and specialists in such areas as finance, marketing and public relations, information systems, and purchasing.

Construction, maintenance, and operating occupations number about 1,500 and represent 3 percent of the industry's employment. General utility maintenance workers are most prominent with employment of 330. These workers exercise their skills in keeping the hospital's structure, machines, and mechanical equipment in good condition. Laundry and dry cleaning operators and tenders number 115 and are followed by heating, refrigeration, and air conditioning mechanics with employment of 105. Providing more than 400 job opportunities between 1983 and 1987, the construction, maintenance, and operating occupations category will increase its share of hospital employment as a result of expansion in laundry services and heating and air conditioning employment.

OCCUPATIONAL STRUCTURE

The following thirteen tables provide hospital employment estimates and projected employment and job openings for the state and counties.

When using the data, please note the following:

1) Certain rural counties are serviced by a single hospital. Employment growth for hospitals in each of the nonmetropolitan counties reflects the rate calculated for the "balance of state" (Arizona less Maricopa and Pima counties). Projected employment for the hospital in Santa Cruz County, for example, reflects levels that would be attained if the hospital were to expand at the rate that is predicted for all hospitals in the "balance of state".

2) The data reflect full and part-time wage and salary employment only, and do not include self-employed or unpaid family workers.

3) "Total Job Openings" represents the number of openings due to growth of the industry and separations from the labor force. They do not account for labor turnover, i.e., openings created when a worker changes jobs, leaving the job to be filled by someone else. These vacancies are often the largest source of job openings.

4) The projection technique does not possess the degree of accuracy that may be implied by small employment and demand figures.

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

STATEWIDE

	Estimated May 1983 Employment	Percent of May 1983 Employment	Projected May 1987 Employment	Total Job Openings 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	1,940	4.1	2,354	693
Financial Managers	109	.2	132	39
Personnel, Training, & Labor Relations Mgrs.	76	.2	90	25
Purchasing Managers	50	.1	60	14
Marketing, Advertising, & Public Rel. Mgrs.	47	.1	56	14
Administrative Services Managers	74	.2	90	26
Medicine & Health Services Managers	820	1.7	1,006	328
Food Service & Lodging Managers	49	.1	58	16
General Managers & Top Executives	331	.7	400	108
All Other Managers & Administrators	384	.8	462	123
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	25,149	53.7	30,680	11,018
Management Support Occupations	493	1.1	597	157
Accountants & Auditors	82	.2	100	29
Budget Analysts	39	.1	45	10
All Other Financial Specialists	15	.0	19	6
Purchasing Agents, Exc. Wholesale, Retail, & Farm	67	.1	80	18
Personnel, Training, & Labor Rel. Specialists	99	.2	119	29
Compliance & Enforcement Inspectors, Exc. Const.	37	.1	45	12
All Other Management Support Workers	154	.3	189	53
Engineering & Related Occupations	193	.4	235	52
Civil Engineers, Incl. Traffic	73	.2	91	25
Electrical & Electronic Engineers	5	.0	6	1
Industrial Engineers, Exc. Safety	11	.0	13	3
Mechanical Engineers	16	.0	19	3
All Other Engineers	10	.0	12	2
Civil Engineering Technicians & Technologists	17	.0	21	5
Electrical/Electronic Engineering Technicians	23	.0	28	6
Industrial Engineering Techs.	6	.0	7	1
Mechanical Engineering Techs.	7	.0	9	2
Drafters	8	.0	9	1
All Other Engineering & Related Technicians	17	.0	20	3
Natural Scientists & Related Occupations	130	.3	155	38
Chemists, Exc. Biochemists	1	.0	1	0
All Other Physical Scientists	18	.0	22	5
Biological Scientists	44	.1	53	14
Medical Scientists	41	.1	49	13
Biological, Agri., & Food Techs., Exc. Health	12	.0	14	3
Chemical Techs., Exc. Health	11	.0	13	3
All Other Physical & Life Science Techs.	3	.0	3	0
Computer, Math, Research, & Related Occupations	79	.2	93	18
Systems Analysts, Electronic Data Processing	33	.1	40	8
Computer Programmers	34	.1	40	8
Computer Programmer Aides	5	.0	5	0
Statisticians	6	.0	7	2
Mathematical Technicians	1	.0	1	0
Social, Recreational, & Related Occupations	776	1.7	949	303
Psychologists	74	.2	91	23
All Other Social Scientists	5	.0	6	1
Social Workers, Medical & Psychiatric	464	1.0	566	195
Social Workers, Exc. Medical & Psychiatric	38	.1	47	16
Social Service Technicians	146	.3	179	51
Clergy	49	.1	60	17
Teachers, Librarians, & Related Occupations	248	.5	301	86
Nursing Instructors	148	.3	181	49
Teachers & Instructors, Voc. Ed. & Training	30	.1	37	11
All Other Teachers & Instructors	38	.1	46	15
Librarians, Professional	19	.0	22	7

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

STATEWIDE (CONTD.)

	Estimated May 1983 Employment	Percent of May 1983 Employment	Projected May 1987 Employment	Total Job Openings 1983-1987
Technical Assistants, Library	13	.0	15	4
Health Practitioners, Techs., & Related Occupations	23,090	49.3	28,178	10,315
Physicians & Surgeons	1,317	2.8	1,598	442
Dentists	65	.1	78	17
Optometrists	10	.0	11	2
Podiatrists	6	.0	7	2
All Other Health Diagnosing/Treating Practitioners	4	.0	5	2
Respiratory Therapists	632	1.3	769	247
Occupational Therapists	114	.2	140	46
Physical Therapists	270	.6	327	102
Corrective & Manual Arts Therapists	13	.0	15	4
Speech Pathologists & Audiologists	49	.1	60	19
Recreational Therapists	34	.1	40	11
All Other Therapists	5	.0	6	2
Registered Nurses	12,141	25.9	14,814	5,620
Licensed Practical Nurses	3,041	6.5	3,717	1,540
Emergency Medical Technicians	106	.2	130	40
Physician Assistants	58	.1	70	25
Opticians, Dispensing & Measuring	1	.0	1	0
Pharmacists	486	1.0	589	190
Dietitians & Nutritionists	168	.4	205	78
Dietetic Technicians	123	.3	150	55
Medical & Clinical Laboratory Technologists	1,009	2.2	1,224	436
Medical & Clinical Laboratory Technicians	601	1.3	740	239
Dental Hygienists	50	.1	62	26
Medical Records Technicians & Technologists	360	.8	440	199
Nuclear Medicine Technologists	129	.3	159	56
Radiologic Technologists	569	1.2	693	237
Radiologic Technicians	268	.6	330	115
Electroencephalograph Techs.	51	.1	61	18
Electrocardiograph Techs.	159	.3	194	61
Surgical Technicians	512	1.1	629	192
All Other Health Professionals, Paraprofessionals, & Technicians	739	1.6	914	292
Writers, Artists, Athletes, & Related	58	.1	71	21
Public Rel. Specialists & Publicity Writers	36	.1	44	14
Photographers	22	.0	27	7
All Other Professional, Paraprofessional, & Technical Workers	82	.2	101	28
SALES & RELATED OCCUPATIONS	101	.2	123	42
Cashiers	93	.2	113	39
All Other Sales & Related Workers	8	.0	10	3
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	8,216	17.5	10,012	3,702
First Line Supers. & Mgr./Supers.	352	.8	426	123
First Line Supers.-Clerical & Admin. Support	352	.8	426	123
Industry-Specific Clerical & Admin. Support	17	.0	20	4
Library Assistants & Bookmobile Drivers	17	.0	20	4
General Office Occupations	5,756	12.3	7,026	2,730
Medical Secretaries	526	1.1	646	269
All Other Secretaries	874	1.9	1,074	449
Stenographers	69	.1	85	32
Receptionists & Information Clerks	143	.3	174	65
Typists	644	1.4	786	339
Typists, Word Processing Equipment	74	.2	92	30
Personnel Clerks, Exc. Payroll & Timekeeping	111	.2	135	58
File Clerks	156	.3	190	83
Order Clerks - Materials, Merch., & Service	43	.1	52	19

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

STATEWIDE (CONTD.)

	Estimated May 1983 Employment	Percent of May 1983 Employment	Projected May 1987 Employment	Total Job Openings 1983-1987
Procurement Clerks	80	.2	95	22
Statistical Clerks	256	.5	311	117
Interviewing Clerks, Exc. Personnel & Welfare	714	1.5	875	304
Bookkeeping, Accounting, & Auditing Clerks	339	.7	416	155
Payroll & Timekeeping Clerks	53	.1	63	19
Billing, Cost, & Rate Clerks	561	1.2	689	266
General Office Clerks	1,113	2.4	1,344	503
Office Machine Operators	367	.8	446	128
Billing, Posting, & Calculating Machine Opers.	25	.0	30	10
Computer Operators, Exc. Peripheral Equipment	91	.2	112	30
Peripheral EDP Equipment Operators	21	.0	26	10
Data Entry Keyers, Exc. Composing	214	.5	259	70
All Other Office Machine Operators	16	.0	19	8
Communications & Message Distribution	278	.6	336	146
Switchboard Operators	278	.6	336	146
Material Distribution & Recording Occupations	532	1.1	647	170
Dispatchers - Police, Fire, & Ambulance	43	.1	53	16
Stock Clerks - Stockroom, Warehouse, or Yard	362	.8	439	113
Traffic, Shipping, & Receiving Clerks	75	.2	91	23
All Other Material Recording/Scheduling/Dist.	52	.1	64	18
All Other Clerical & Admin. Support Occupations	914	2.0	1,111	378
SERVICE OCCUPATIONS	9,902	21.1	12,072	4,377
First Line Supervisors & Managers - Service	446	1.0	535	178
Housekeepers	268	.6	319	101
All Service Supervisors & Managers	178	.4	216	77
Protective Service Occupations	256	.5	314	68
Guards & Watch Guards	256	.5	314	68
Food & Beverage Preparation	2,036	4.3	2,482	807
Waiters & Waitresses	4	.0	5	2
Food Servers, Outside	417	.9	510	150
Dining Room/Cafeteria Attdts. & Bartdr. Helpers	82	.2	96	17
Counter Attendants - Lunchroom, Coffee Shop, & Cafeteria	58	.1	72	28
Bakers, Bread & Pastry	16	.0	19	5
Cooks, Institution or Cafeteria	364	.8	444	141
Cooks, Short Order	36	.1	44	12
Food Preparation Workers	776	1.7	947	332
All Other Food Service Workers	283	.6	345	120
Health Services & Related Occupations	5,083	10.8	6,210	2,342
Dental Assistants	135	.3	166	76
Medical Assistants	378	.8	460	177
Nursing Aides, Orderlies, & Attendants	3,275	7.0	3,995	1,530
Home Health Aides	43	.1	53	16
Psychiatric Aides	199	.4	245	95
Physical & Corrective Therapy Assists./Aides	244	.5	298	112
Occupational Therapy Assistants & Aides	201	.4	250	100
Ambulance Drivers & Attendants - Exc. Emergency Medical Technicians	37	.1	46	13
Pharmacy Assistants	284	.6	344	129
All Other Health Service Workers	287	.6	353	94
Cleaning & Building Services Occupations	1,982	4.2	2,411	937
Maids & Housekeeping Cleaners	1,551	3.3	1,887	778
Janitors & Cleaners, Exc. Maids & Housekeeping	361	.8	438	133
Elevator Operators	1	.0	1	0
All Other Cleaning/Building Service, Exc. Private House	69	.1	85	26

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

STATEWIDE (CONTD.)

	Estimated May 1983 Employment	Percent of May 1983 Employment	Projected May 1987 Employment	Total Job Openings 1983-1987
Personal Service Occupations	38	.1	47	19
Barbers	4	.0	5	1
Hairdressers, Hairstylists, & Cosmetologists	5	.0	6	2
Social Welfare Service Aides	3	.0	4	2
Child Care Workers	26	.1	32	14
All Other Service Occupations	61	.1	73	26
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	75	.2	89	24
Gardeners & Groundskeepers, Exc. Farm	72	.2	86	24
All Other Agri., Forestry, Fishing, & Related	3	.0	3	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	1,482	3.2	1,794	428
First Line Supervisors & Managers - Prod. & Rel.	151	.3	181	50
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	64	.1	76	19
First Line Managers/Supervisors - Construction Trades & Extraction Workers	27	.1	32	9
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	60	.1	73	22
Inspectors & Related Occupations	2	.0	2	0
Mechanics, Installers & Repairers	580	1.2	709	166
Machinery Maintenance Mechanics	41	.1	51	12
Maintenance Repairers, General Utility	330	.7	405	98
Heating, Air Conditioning, & Refrigeration Mechanics & Installers	105	.2	127	29
Electromedical & Biomedical Equip. Repairers	72	.2	87	18
Menders - Garments, Linens, & Related	11	.0	13	3
All Other Mechanics, Installers, & Repairers	21	.0	26	6
Construction Trades & Extraction	258	.6	309	70
Carpenters	67	.1	80	19
Electricians	69	.1	83	19
Painters & Paperhangers - Construction & Maintenance	51	.1	61	15
Plumbers, Pipefitters, & Steamfitters	43	.1	51	10
All Other Construction Trades Workers	28	.1	34	7
Precision Production Occupations	20	.0	22	2
Machinists	4	.0	4	0
Precision Dental Laboratory Technicians	8	.0	9	1
Medical Appliance Makers	1	.0	1	0
All Other Precision Workers	7	.0	8	1
Machine Setters, Operatives, & Tenders	186	.4	225	60
Sewing Machine Operators, Non-Garment	11	.0	13	3
Laundry/Drycleaning Mach. Opers., Exc. Pressing	115	.2	140	40
Pressing Machine Opers. - Textile & Garments	13	.0	16	5
Boiler Operators & Tenders, Low Pressure	25	.1	29	5
All Machine Setters & Set-Up Operators	16	.0	20	6
All Other Machine Operators & Tenders	6	.0	7	1
Assemblers & Fabricators	15	.0	17	3
Sewers, Hand	4	.0	4	0
All Other Hand Workers	11	.0	13	3
Plant & System Occupations	91	.2	111	29
Stationary Engineers	86	.2	105	28
All Other Plant & System Operators	5	.0	6	1

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

STATEWIDE (CONTD.)

	Estimated May 1983 Employment	Percent of May 1983 Employment	Projected May 1987 Employment	Total Job Openings 1983-1987
Transportation, Material Moving Equipment	101	.2	123	26
Truck Drivers, Light - Incl. Delivery & Route	52	.1	64	14
All Other Motor Vehicle Operators	20	.0	24	5
All Other Transportation & Related Workers	18	.0	22	5
Industrial Truck & Tractor Operators	11	.0	13	2
Helpers, Laborers, & Material Movers - Hand	78	.2	95	22
TOTAL ALL OCCUPATIONS	46,865	100.0	57,124	20,284

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

APACHE COUNTY

	Estimated May 1983 Employment	Projected May 1987 Employment	Job Openings Due to Growth 1983-1987	Job Openings Due to Separations 1983-1987	Total Job Openings 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	18	21	3	2	5
Financial Managers	1	1	0	0	0
Administrative Services Managers	1	1	0	0	0
Medicine & Health Services Managers	10	12	2	2	4
General Managers & Top Executives	4	5	1	0	1
All Other Managers & Administrators	2	2	0	0	0
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	315	381	66	61	127
Accountants & Auditors	1	1	0	0	0
Budget Analysts	2	2	0	0	0
Purchasing Agents, Exc. Wholesale, Retail, & Farm	2	2	0	0	0
Personnel, Training, & Labor Rel. Specialists	2	2	0	0	0
Compliance & Enforcement Inspectors, Exc. Const.	1	1	0	0	0
All Other Management Support Workers	1	1	0	0	0
Civil Engineers, Incl. Traffic	9	11	2	1	3
Industrial Engineers, Exc. Safety	1	1	0	0	0
Civil Engineering Technicians & Technologists	8	10	2	1	3
Drafters	4	5	1	0	1
All Other Engineering & Related Technicians	6	7	1	0	1
All Physical Scientists	2	2	0	0	0
Biological, Agri., & Food Techs., Exc. Health	1	1	0	0	0
Chemical Techs., Exc. Health	1	1	0	0	0
All Other Physical & Life Science Techs.	2	2	0	0	0
Psychologists	1	1	0	0	0
Social Workers, Medical & Psychiatric	3	4	1	1	2
Social Service Technicians	5	6	1	1	2
Teachers & Instructors, Voc. Ed. & Training	1	1	0	0	0
Physicians & Surgeons	26	32	6	3	9
Dentists	9	11	2	1	3
Optometrists	1	1	0	0	0
Physical Therapists	2	2	0	0	0
Registered Nurses	101	124	23	25	48
Licensed Practical Nurses	28	34	6	8	14
Emergency Medical Technicians	5	6	1	1	2
Physician Assistants	4	5	1	1	2
Pharmacists	8	10	2	1	3
Dietitians & Nutritionists	1	1	0	0	0
Dietetic Technicians	4	5	1	1	2
Medical & Clinical Laboratory Technologists	14	17	3	3	6
Medical & Clinical Laboratory Technicians	6	7	1	1	2
Dental Hygienists	9	11	2	2	4
Medical Records Technicians & Technologists	17	21	4	6	10
Nuclear Medicine Technologists	1	1	0	0	0
Radiologic Technologists	6	7	1	1	2
Radiologic Technicians	4	5	1	1	2
Surgical Technicians	3	4	1	0	1
All Other Health Professionals, Paraprofessionals, & Technicians	13	16	3	2	5
SALES & RELATED OCCUPATIONS	1	1	0	0	0
Cashiers	1	1	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	90	111	21	22	43
First Line Supers.-Clerical & Admin. Support	6	7	1	1	2
Library Assistants & Bookmobile Drivers	1	1	0	0	0
Medical Secretaries	11	14	3	3	6
All Other Secretaries	14	17	3	4	7
Stenographers	1	1	0	0	0
Receptionists & Information Clerks	3	4	1	0	1
Typists	7	9	2	2	4
Personnel Clerks, Exc. Payroll & Timekeeping	3	4	1	1	2
Procurement Clerks	2	2	0	0	0
Statistical Clerks	1	1	0	0	0

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

APACHE COUNTY (CONTD.)

	Estimated May 1983 Employment	Projected May 1987 Employment	Job Openings Due to Growth 1983-1987	Job Openings Due to Separations 1983-1987	Total Job Openings 1983-1987
Bookkeeping, Accounting, & Auditing Clerks	3	4	1	1	2
Billing, Cost, & Rate Clerks	3	4	1	1	2
Data Entry Keyers, Exc. Composing	1	1	0	0	0
Switchboard Operators	5	6	1	1	2
Stock Clerks - Stockroom, Warehouse, or Yard	4	5	1	0	1
All Other Clerical & Administrative Support	25	31	6	8	14
SERVICE OCCUPATIONS	125	153	28	27	55
Housekeepers	2	2	0	0	0
All Service Supervisors & Managers	1	1	0	0	0
Guards & Watch Guards	4	5	1	0	1
Food Servers, Outside	1	1	0	0	0
Cooks, Institution or Cafeteria	7	9	2	1	3
Cooks, Short Order	2	2	0	0	0
Food Preparation Workers	5	6	1	1	2
Dental Assistants	11	14	3	4	7
Nursing Aides, Orderlies, & Attendants	58	71	13	14	27
Home Health Aides	2	2	0	0	0
Physical & Corrective Therapy Assists./Aides	1	1	0	0	0
Pharmacy Assistants	4	5	1	1	2
All Other Health Service Workers	3	4	1	0	1
Maids & Housekeeping Cleaners	21	26	5	6	11
Janitors & Cleaners, Exc. Maids & Housekeeping	3	4	1	0	1
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	2	2	0	0	0
Gardeners & Groundskeepers, Exc. Farm	2	2	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	43	52	9	2	11
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	3	4	1	0	1
Machinery Maintenance Mechanics	3	4	1	0	1
Maintenance Repairers, General Utility	8	10	2	1	3
Heating, Air Conditioning, & Refrigeration Mechanics & Installers	3	4	1	0	1
Electromedical & Biomedical Equip. Repairers	2	2	0	0	0
Carpenters	1	1	0	0	0
Electricians	2	2	0	0	0
Plumbers, Pipefitters, & Steamfitters	1	1	0	0	0
Machinists	1	1	0	0	0
Boiler Operators & Tenders, Low Pressure	1	1	0	0	0
Truck Drivers, Light - Incl. Delivery & Route	16	20	4	1	5
Helpers, Laborers, & Material Movers, Hand	2	2	0	0	0
TOTAL ALL OCCUPATIONS	594	721	127	114	241

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

COCHISE COUNTY

	Estimated May 1983 Employment	Projected May 1987 Employment	Job Openings Due to Growth 1983-1987	Job Openings Due to Separations 1983-1987	Total Job Openings 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	43	52	9	6	15
Financial Managers	6	7	1	1	2
Personnel, Training, & Labor Relations Mgrs.	1	1	0	0	0
Purchasing Managers	3	4	1	0	1
Marketing, Advertising, & Public Rel. Mgrs.	1	1	0	0	0
Administrative Services Managers	3	4	1	1	2
Medicine & Health Services Managers	15	18	3	2	5
Food Service & Lodging Managers	1	1	0	0	0
General Managers & Top Executives	6	7	1	1	2
All Other Managers & Administrators	7	9	2	1	3
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	383	466	83	94	177
Accountants & Auditors	2	2	0	0	0
Budget Analysts	2	2	0	0	0
Purchasing Agents, Exc. Wholesale, Retail, & Farm	2	2	0	0	0
Computer Programmers	1	1	0	0	0
Computer Programmer Aides	1	1	0	0	0
Social Workers, Medical & Psychiatric	4	5	1	0	1
Social Service Technicians	1	1	0	0	0
Nursing Instructors	2	2	0	0	0
Technical Assistants, Library	1	1	0	0	0
Physicians & Surgeons	9	11	2	1	3
Dentists	1	1	0	0	0
Optometrists	1	1	0	0	0
Respiratory Therapists	6	7	1	1	2
Occupational Therapists	1	1	0	0	0
Physical Therapists	5	6	1	1	2
Registered Nurses	169	208	39	41	80
Licensed Practical Nurses	67	83	16	19	35
Emergency Medical Technicians	6	7	1	1	2
Pharmacists	12	15	3	2	5
Dietitians & Nutritionists	3	4	1	1	2
Dietetic Technicians	1	1	0	0	0
Medical & Clinical Laboratory Technologists	21	26	5	5	10
Medical & Clinical Laboratory Technicians	6	7	1	1	2
Dental Hygienists	12	15	3	4	7
Medical Records Technicians & Technologists	15	18	3	5	8
Radiologic Technologists	2	2	0	0	0
Radiologic Technicians	15	18	3	3	6
Surgical Technicians	9	11	2	1	3
All Other Health Professionals, Paraprofessionals, & Technicians	6	7	1	8	9
SALES & RELATED OCCUPATIONS	2	2	0	0	0
Cashiers	2	2	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	163	197	34	33	67
First Line Supers.-Clerical & Admin. Support	9	11	2	1	3
Medical Secretaries	4	5	1	1	2
All Other Secretaries	15	18	3	4	7
Stenographers	2	2	0	0	0
Typists	15	18	3	5	8
Personnel Clerks, Exc. Payroll & Timekeeping	1	1	0	0	0
Procurement Clerks	5	6	1	0	1
Statistical Clerks	4	5	1	1	2
Interviewing Clerks, Exc. Personnel & Welfare	19	23	4	4	8
Bookkeeping, Accounting, & Auditing Clerks	5	6	1	1	2
Billing, Cost, & Rate Clerks	21	26	5	5	10
General Office Clerks	6	7	1	1	2
Computer Operators, Exc. Peripheral Equipment	2	2	0	0	0
Data Entry Keyers, Exc. Composing	4	5	1	0	1
Switchboard Operators	2	2	0	0	0
Stock Clerks - Stockroom, Warehouse, or Yard	9	11	2	1	3

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

COCHISE COUNTY (CONTD.)

	Estimated May 1983 Employment	Projected May 1987 Employment	Job Openings Due to Growth 1983-1987	Job Openings Due to Separations 1983-1987	Total Job Openings 1983-1987
All Other Material Recording/Scheduling/Dist.	1	1	0	0	0
All Other Clerical & Administrative Support	39	48	9	9	18
SERVICE OCCUPATIONS	241	293	52	54	106
Housekeepers	8	10	2	2	4
All Service Supervisors & Managers	2	2	0	0	0
Guards & Watch Guards	1	1	0	0	0
Food Servers, Outside	2	2	0	0	0
Bakers, Bread & Pastry	1	1	0	0	0
Cooks, Institution or Cafeteria	22	27	5	4	9
Food Preparation Workers	39	48	9	8	17
All Other Food Service Workers	1	1	0	0	0
Dental Assistants	6	7	1	2	3
Medical Assistants	1	1	0	0	0
Nursing Aides, Orderlies, & Attendants	101	124	23	25	48
Psychiatric Aides	3	4	1	1	2
Physical & Corrective Therapy Assists./Aides	6	7	1	1	2
Occupational Therapy Assistants & Aides	1	1	0	0	0
Pharmacy Assistants	6	7	1	1	2
All Other Health Service Workers	2	2	0	0	0
Maids & Housekeeping Cleaners	29	36	7	8	15
Janitors & Cleaners, Exc. Maids & Housekeeping	10	12	2	2	4
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	2	2	0	0	0
Gardeners & Groundskeepers, Exc. Farm	2	2	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	23	27	4	2	6
First Line Managers/Supervisors - Mechanics/Installers/Repairers	1	1	0	0	0
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	4	5	1	1	2
Machinery Maintenance Mechanics	1	1	0	0	0
Maintenance Repairers, General Utility	9	11	2	1	3
Electromedical & Biomedical Equip. Repairers	4	5	1	0	1
Precision Dental Laboratory Technicians	1	1	0	0	0
All Other Hand Workers	1	1	0	0	0
Industrial Truck & Tractor Operators	2	2	0	0	0
TOTAL ALL OCCUPATIONS	857	1,039	182	189	371

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

COCONINO COUNTY

	Estimated May 1983 Employment	Projected May 1987 Employment	Job Openings Due to Growth 1983-1987	Job Openings Due to Separations 1983-1987	Total Job Openings 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	66	80	14	8	22
Financial Managers	2	2	0	0	0
Personnel, Training, & Labor Relations Mgrs.	2	2	0	0	0
Purchasing Managers	1	1	0	0	0
Administrative Services Managers	1	1	0	0	0
Medicine & Health Services Managers	12	15	3	2	5
Food Service & Lodging Managers	5	6	1	1	2
General Managers & Top Executives	39	48	9	5	14
All Other Managers & Administrators	4	5	1	0	1
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	518	631	113	110	223
Accountants & Auditors	3	4	1	0	1
Purchasing Agents, Exc. Wholesale, Retail, & Farm	3	4	1	0	1
Personnel, Training, & Labor Rel. Specialists	2	2	0	0	0
Compliance & Enforcement Inspectors, Exc. Const.	1	1	0	0	0
All Other Management Support Workers	1	1	0	0	0
Civil Engineers, Incl. Traffic	4	5	1	0	1
Mechanical Engineers	1	1	0	0	0
Civil Engineering Technicians & Technologists	3	4	1	0	1
Drafters	1	1	0	0	0
All Other Engineering & Related Technicians	3	4	1	0	1
Social Workers, Medical & Psychiatric	10	12	2	2	4
Social Service Technicians	1	1	0	0	0
Nursing Instructors	2	2	0	0	0
All Other Teachers & Instructors	2	2	0	0	0
Physicians & Surgeons	22	27	5	3	8
Dentists	6	7	1	0	1
Optometrists	2	2	0	0	0
Respiratory Therapists	3	3	0	0	0
Physical Therapists	3	3	0	0	0
Recreational Therapists	2	2	0	0	0
Registered Nurses	297	366	69	70	139
Licensed Practical Nurses	53	65	12	15	27
Emergency Medical Technicians	2	2	0	0	0
Physician Assistants	6	7	1	1	2
Pharmacists	15	18	3	3	6
Dietitians & Nutritionists	4	5	1	1	2
Medical & Clinical Laboratory Technologists	22	27	5	5	10
Medical & Clinical Laboratory Technicians	5	6	1	1	2
Dental Hygienists	1	1	0	0	0
Medical Records Technicians & Technologists	12	15	3	4	7
Radiologic Technologists	18	22	4	4	8
Radiologic Technicians	1	1	0	0	0
Surgical Technicians	5	6	1	1	2
All Other Health Professionals, Paraprofessionals, & Technicians	2	2	0	0	0
SALES & RELATED OCCUPATIONS	2	2	0	0	0
Cashiers	2	2	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	114	138	24	28	52
First Line Supers.-Clerical & Admin. Support	2	2	0	0	0
Library Assistants & Bookmobile Drivers	1	1	0	0	0
Medical Secretaries	12	15	3	4	7
All Other Secretaries	3	4	1	1	2
Stenographers	1	1	0	0	0
Receptionists & Information Clerks	4	5	1	1	2
Typists	20	25	5	6	11
Personnel Clerks, Exc. Payroll & Timekeeping	3	4	1	1	2
File Clerks	2	2	0	1	1
Procurement Clerks	2	2	0	0	0
Statistical Clerks	1	1	0	0	0
Bookkeeping, Accounting, & Auditing Clerks	4	5	1	1	2

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

COCONINO COUNTY (CONTD.)

	Estimated May 1983 Employment	Projected May 1987 Employment	Job Openings Due to Growth 1983-1987	Due to Separations 1983-1987	Total Job Openings 1983-1987
Payroll & Timekeeping Clerks	1	1	0	0	0
Billing, Cost, & Rate Clerks	5	6	1	1	2
General Office Clerks	35	43	8	9	17
Billing, Posting, & Calculating Machine Opers.	2	2	0	0	0
Data Entry Keyers, Exc. Composing	2	2	0	0	0
Switchboard Operators	9	11	2	3	5
Stock Clerks - Stockroom, Warehouse, or Yard	3	4	1	0	1
Traffic, Shipping, & Receiving Clerks	2	2	0	0	0
SERVICE OCCUPATIONS	218	267	49	49	98
Housekeepers	4	5	1	1	2
All Service Supervisors & Managers	1	1	0	0	0
Guards & Watch Guards	7	9	2	0	2
Food Servers, Outside	9	11	2	1	3
Cooks, Institution or Cafeteria	8	9	1	1	2
Cooks, Short Order	3	4	1	0	1
Food Preparation Workers	19	23	4	4	8
Dental Assistants	9	11	2	3	5
Medical Assistants	4	5	1	1	2
Nursing Aides, Orderlies, & Attendants	94	116	22	23	45
Physical & Corrective Therapy Assists./Aides	2	2	0	0	0
Pharmacy Assistants	1	1	0	0	0
Maids & Housekeeping Cleaners	45	55	10	13	23
Janitors & Cleaners, Exc. Maids & Housekeeping	12	15	3	2	5
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	26	32	6	0	6
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	3	4	1	0	1
Machinery Maintenance Mechanics	3	4	1	0	1
Maintenance Repairers, General Utility	5	6	1	0	1
Electromedical & Biomedical Equip. Repairers	2	2	0	0	0
Electricians	1	1	0	0	0
Painters & Paperhangers - Construction & Maintenance	1	1	0	0	0
Plumbers, Pipefitters, & Seamfitters	1	1	0	0	0
Laundry/Drycleaning Mach. Opers., Exc. Pressing	3	4	1	0	1
All Transportation & Related Workers	4	5	1	0	1
Helpers, Laborers, & Material Movers, Hand	3	4	1	0	1
TOTAL ALL OCCUPATIONS	944	1,150	206	195	401

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

GILA COUNTY

	Estimated May 1983 Employment	Projected May 1987 Employment	Job Openings Due to Growth 1983-1987	Job Openings Due to Separations 1983-1987	Total Job Openings 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	14	17	3	2	5
Financial Managers	1	1	0	0	0
Administrative Services Managers	1	1	0	0	0
Medicine & Health Services Managers	9	11	2	2	4
General Managers & Top Executives	3	4	1	0	1
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	256	313	57	54	111
Purchasing Agents, Exc. Wholesale, Retail, & Farm	2	2	0	0	0
All Engineers	1	1	0	0	0
Psychologists	1	1	0	0	0
Social Workers, Medical & Psychiatric	2	2	0	0	0
Social Workers, Exc. Medical & Psychiatric	2	2	0	0	0
Social Service Technicians	3	4	1	0	1
All Teachers & Instructors	1	1	0	0	0
Librarians, Professional	2	2	0	0	0
Physicians & Surgeons	10	12	2	1	3
Dentists	2	2	0	0	0
Respiratory Therapists	8	10	2	1	3
Physical Therapists	3	4	1	0	1
Registered Nurses	112	138	26	27	53
Licensed Practical Nurses	50	62	12	14	26
Physician Assistants	1	1	0	0	0
Pharmacists	10	12	2	2	4
Dietitians & Nutritionists	1	1	0	0	0
Medical & Clinical Laboratory Technologists	11	14	3	2	5
Medical & Clinical Laboratory Technicians	11	14	3	2	5
Dental Hygienists	3	4	1	1	2
Medical Records Technicians & Technologists	6	7	1	2	3
Radiologic Technologists	3	4	1	1	2
Radiologic Technicians	5	6	1	1	2
Electrocardiograph Techs.	1	1	0	0	0
Surgical Technicians	2	2	0	0	0
All Other Health Professionals, Paraprofessionals, & Technicians	3	4	I	0	1
SALES & RELATED OCCUPATIONS	1	1	0	0	0
Cashiers	1	1	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	78	94	16	17	33
Medical Secretaries	3	4	1	1	2
Stenographers	3	4	1	1	2
Receptionists & Information Clerks	3	4	1	1	2
Typists	6	7	1	2	3
Personnel Clerks, Exc. Payroll & Timekeeping	1	1	0	0	0
File Clerks	2	2	0	1	1
Procurement Clerks	2	2	0	0	0
Interviewing Clerks, Exc. Personnel & Welfare	6	7	1	1	2
Bookkeeping, Accounting, & Auditing Clerks	4	5	1	1	2
Payroll & Timekeeping Clerks	2	2	0	0	0
Billing, Cost, & Rate Clerks	7	9	2	2	4
General Office Clerks	7	9	2	2	4
Computer Operators, Exc. Peripheral Equipment	5	6	1	1	2
Data Entry Keyers, Exc. Composing	1	1	0	0	0
Switchboard Operators	6	7	1	2	3
Stock Clerks - Stockroom, Warehouse, or Yard	5	6	1	0	1
Traffic, Shipping, & Receiving Clerks	2	2	0	0	0
All Other Material Recording/Scheduling/Dist.	4	5	1	0	1
All Other Clerical & Administrative Support	9	11	2	2	4
SERVICE OCCUPATIONS	199	245	46	48	94
Housekeepers	3	4	1	1	2
All Service Supervisors & Managers	4	5	1	1	2
Guards & Watch Guards	2	2	0	0	0

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

GILA COUNTY (CONTD.)

	Estimated May 1983 Employment	Projected May 1987 Employment	Job Openings Due to Growth 1983-1987	Job Openings Due to Separations 1983-1987	Total Job Openings 1983-1987
Cooks, Institution or Cafeteria	14	17	3	2	5
Food Preparation Workers	24	30	6	5	11
All Other Food Service Workers	4	5	1	1	2
Dental Assistants	1	1	0	0	0
Nursing Aides, Orderlies, & Attendants	97	120	23	25	48
Physical & Corrective Therapy Assists./Aides	6	7	1	1	2
Pharmacy Assistants	4	5	1	1	2
Maids & Housekeeping Cleaners	34	42	8	10	18
Janitors & Cleaners, Exc. Maids & Housekeeping	6	7	1	1	2
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	1	1	0	0	0
Gardeners & Groundskeepers, Exc. Farm	1	1	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	31	38	7	3	10
First Line Managers/Supervisors - Mechanics/Installers/Repairers	1	1	0	0	0
Maintenance Repairers, General Utility	17	21	4	1	5
All Construction Trades Workers	1	1	0	0	0
Pressing Machine Opers. - Textile & Garments	11	14	3	2	5
All Motor Vehicle Operators	1	1	0	0	0
TOTAL ALL OCCUPATIONS	580	709	129	124	253

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

GRAHAM COUNTY

	Estimated May 1983 Employment	Projected May 1987 Employment	Job Openings Due to Growth 1983-1987	Job Openings Due to Separations 1983-1987	Total Job Openings 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	3	3	0	0	0
Medicine & Health Services Managers	2	2	0	0	0
General Managers & Top Executives	1	1	0	0	0
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	63	76	13	15	28
Purchasing Agents, Exc. Wholesale, Retail, & Farm	1	1	0	0	0
Registered Nurses	36	44	8	9	17
Licensed Practical Nurses	9	11	2	3	5
Emergency Medical Technicians	5	6	1	1	2
Physician Assistants	1	1	0	0	0
Medical & Clinical Laboratory Technologists	5	6	1	1	2
Medical Records Technicians & Technologists	1	1	0	0	0
Radiologic Technologists	4	5	1	1	2
Surgical Technicians	1	1	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	21	24	3	3	6
First Line Supers.-Clerical & Admin. Support	2	2	0	0	0
Typists	1	1	0	0	0
Personnel Clerks, Exc. Payroll & Timekeeping	1	1	0	0	0
File Clerks	3	4	1	1	2
Bookkeeping, Accounting, & Auditing Clerks	2	2	0	0	0
Payroll & Timekeeping Clerks	1	1	0	0	0
General Office Clerks	8	10	2	2	4
Data Entry Keyers, Exc. Composing	1	1	0	0	0
Switchboard Operators	1	1	0	0	0
All Other Clerical & Administrative Support	1	1	0	0	0
SERVICE OCCUPATIONS	48	58	10	9	19
Housekeepers	1	1	0	0	0
All Service Supervisors & Managers	1	1	0	0	0
Dining Room/Cafeteria Attdts. & Bartdr. Helpers	5	6	1	0	1
Cooks, Institution or Cafeteria	3	4	1	0	1
Nursing Aides, Orderlies, & Attendants	23	28	5	5	10
Pharmacy Assistants	2	2	0	0	0
Maids & Housekeeping Cleaners	13	16	3	4	7
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	1	1	0	0	0
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	1	1	0	0	0
TOTAL ALL OCCUPATIONS	136	162	26	27	53

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

GREENLEE COUNTY

	Estimated May 1983 Employment	Projected May 1987 Employment	Job Openings Due to Growth 1983-1987	Job Openings Due to Separations 1983-1987	Total Job Openings 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	4	5	1	0	1
Medicine & Health Services Managers	3	4	1	0	1
General Managers & Top Executives	1	1	0	0	0
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	43	51	8	8	16
Accountants & Auditors	1	1	0	0	0
Physicians & Surgeons	6	7	1	1	2
Registered Nurses	23	28	5	5	10
Pharmacists	1	1	0	0	0
Medical & Clinical Laboratory Technicians	6	7	1	1	2
Radiologic Technicians	4	5	1	1	2
All Other Health Professionals, Paraprofessionals, & Technicians	2	2	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	16	18	2	4	6
Medical Secretaries	1	1	0	0	0
Receptionists & Information Clerks	1	1	0	0	0
Typists	2	2	0	1	1
Billing, Cost, & Rate Clerks	5	6	1	1	2
General Office Clerks	4	5	1	1	2
Switchboard Operators	2	2	0	1	1
All Other Clerical & Administrative Support	1	1	0	0	0
SERVICE OCCUPATIONS	27	33	6	7	13
Housekeepers	1	1	0	0	0
Food Preparation Workers	4	5	1	1	2
Nursing Aides, Orderlies, & Attendants	14	17	3	4	7
Maids & Housekeeping Cleaners	4	5	1	1	2
Janitors & Cleaners, Exc. Maids & Housekeeping	4	5	1	1	2
TOTAL ALL OCCUPATIONS	90	107	17	19	36

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

LA PAZ COUNTY

	Estimated May 1983 Employment	Projected May 1987 Employment	Job Openings Due to Growth 1983-1987	Job Openings Due to Separations 1983-1987	Total Job Openings 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	8	9	1	1	2
Financial Managers	1	1	0	0	0
Administrative Services Managers	1	1	0	0	0
Medicine & Health Services Managers	4	5	1	1	2
General Managers & Top Executives	2	2	0	0	0
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	71	86	15	13	28
All Management Support Workers	3	4	1	0	1
Social Workers, Medical & Psychiatric	1	1	0	0	0
Nursing Instructors	1	1	0	0	0
Physicians & Surgeons	4	5	1	0	1
Dentists	1	1	0	0	0
Respiratory Therapists	2	2	0	0	0
Physical Therapists	1	1	0	0	0
Registered Nurses	29	36	7	7	14
Licensed Practical Nurses	11	14	3	3	6
Pharmacists	1	1	0	0	0
Dietitians & Nutritionists	1	1	0	0	0
Dietetic Technicians	2	2	0	0	0
Medical & Clinical Laboratory Technologists	3	4	1	1	2
Medical & Clinical Laboratory Technicians	2	2	0	0	0
Medical Records Technicians & Technologists	3	4	1	1	2
Radiologic Technicians	5	6	1	1	2
Surgical Technicians	1	1	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	22	25	3	5	8
First Line Supers.-Clerical & Admin. Support	1	1	0	0	0
Secretaries	2	2	0	1	1
Typists	2	2	0	1	1
Personnel Clerks, Exc. Payroll & Timekeeping	1	1	0	0	0
Interviewing Clerks, Exc. Personnel & Welfare	1	1	0	0	0
Bookkeeping, Accounting, & Auditing Clerks	6	7	1	1	2
Billing, Cost, & Rate Clerks	1	1	0	0	0
Computer Operators, Exc. Peripheral Equipment	1	1	0	0	0
Data Entry Keyers, Exc. Composing	1	1	0	0	0
Switchboard Operators	3	4	1	1	2
All Other Clerical & Administrative Support	3	4	1	1	2
SERVICE OCCUPATIONS	36	44	8	7	15
Cooks, Institution or Cafeteria	3	4	1	0	1
Food Preparation Workers	3	4	1	1	2
All Other Food Service Workers	2	2	0	0	0
Dental Assistants	1	1	0	0	0
Nursing Aides, Orderlies, & Attendants	17	21	4	4	8
Physical & Corrective Therapy Assists./Aides	1	1	0	0	0
Maids & Housekeeping Cleaners	7	9	2	2	4
Janitors & Cleaners, Exc. Maids & Housekeeping	2	2	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	8	9	1	0	1
All First Line Managers/Supervisors - Maintenance/Production/Construction	1	1	0	0	0
Maintenance Repairers, General Utility	5	6	1	0	1
Heating, Air Conditioning, & Refrigeration Mechanics & Installers	1	1	0	0	0
All Motor Vehicle Operators	1	1	0	0	0
TOTAL ALL OCCUPATIONS	145	173	28	26	54

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

MARICOPA COUNTY

	Estimated May 1983 Employment	Projected May 1987 Employment	Job Openings Due to Growth 1983-1987	Job Openings Due to Separations 1983-1987	Total Job Openings 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	1,150	1,430	280	178	458
Financial Managers	68	85	17	11	28
Personnel, Training, & Labor Relations Mgrs.	43	53	10	7	17
Purchasing Managers	26	32	6	3	9
Marketing, Advertising, & Public Rel. Mgrs.	34	42	8	4	12
Administrative Services Managers	41	51	10	6	16
Medicine & Health Services Managers	592	736	144	103	247
Food Service & Lodging Managers	19	24	5	3	8
General Managers & Top Executives	147	183	36	19	55
All Other Managers & Administrators	180	224	44	22	66
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	15,985	19,884	3,899	3,522	7,421
Accountants & Auditors	66	82	16	10	26
Budget Analysts	22	27	5	3	8
All Other Financial Specialists	15	19	4	2	6
Purchasing Agents, Exc. Wholesale, Retail, & Farm	39	49	10	4	14
Personnel, Training, & Labor Rel. Specialists	68	85	17	7	24
Compliance & Enforcement Inspectors, Exc. Const.	33	41	8	4	12
All Other Management Support Workers	119	148	29	15	44
Civil Engineers, Incl. Traffic	60	75	15	6	21
Electrical & Electronic Engineers	4	5	1	0	1
Industrial Engineers, Exc. Safety	10	12	2	1	3
Mechanical Engineers	11	14	3	0	3
All Other Engineers	8	10	2	0	2
Civil Engineering Technicians & Technologists	5	6	1	0	1
Electrical/Electronic Engineering Technicians	19	24	5	1	6
Industrial Engineering Techs.	6	7	1	0	1
Mechanical Engineering Techs.	7	9	2	0	2
Drafters	2	2	0	0	0
All Other Engineering & Related Technicians	5	6	1	0	1
All Physical Scientists	16	20	4	1	5
Biological Scientists	22	27	5	3	8
Medical Scientists	26	32	6	3	9
Biological, Agri., & Food Techs., Exc. Health	1	1	0	0	0
Chemical Techs., Exc. Health	10	12	2	1	3
Systems Analysts, Electronic Data Processing	29	36	7	1	8
Computer Programmers	13	16	3	1	4
Computer Programmer Aides	1	1	0	0	0
Statisticians	6	7	1	1	2
Mathematical Technicians	1	1	0	0	0
Psychologists	65	81	16	6	22
All Other Social Scientists	5	6	1	0	1
Social Workers, Medical & Psychiatric	320	398	78	66	144
Social Workers, Exc. Medical & Psychiatric	31	39	8	6	14
Social Service Technicians	102	127	25	13	38
Clergy	28	35	7	4	11
Nursing Instructors	112	139	27	13	40
Teachers & Instructors, Voc. Ed. & Training	28	35	7	4	11
All Other Teachers & Instructors	31	39	8	7	15
Librarians, Professional	8	10	2	2	4
Technical Assistants, Library	8	10	2	2	4
Physicians & Surgeons	767	954	187	95	282
Dentists	32	40	8	3	11
Optometrists	5	6	1	1	2
Podiatrists	5	6	1	1	2
All Other Health Diagnosing/Treating Practitioners	4	5	1	1	2
Respiratory Therapists	410	510	100	74	174
Occupational Therapists	90	112	22	16	38
Physical Therapists	169	210	41	30	71
Corrective & Manual Arts Therapists	9	11	2	2	4
Speech Pathologists & Audiologists	35	44	9	6	15
Recreational Therapists	22	27	5	4	9

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

MARICOPA COUNTY (CONTD.)

	Estimated May 1983 Employment	Projected May 1987 Employment	Job Openings Due to Growth 1983-1987	Job Openings Due to Separations 1983-1987	Total Job Openings 1983-1987
All Other Therapists	5	6	1	1	2
Registered Nurses	7,604	9,459	1,855	1,873	3,728
Licensed Practical Nurses	1,814	2,257	443	521	964
Emergency Medical Technicians	81	101	20	12	32
Physician Assistants	32	40	8	8	16
Opticians, Dispensing & Measuring	1	1	0	0	0
Pharmacists	264	328	64	49	113
Dietitians & Nutritionists	100	124	24	25	49
Dietetic Technicians	91	113	22	23	45
Medical & Clinical Laboratory Technologists	530	659	129	118	247
Medical & Clinical Laboratory Technicians	422	525	103	71	174
Dental Hygienists	21	26	5	6	11
Medical Records Technicians & Technologists	212	264	52	70	122
Nuclear Medicine Technologists	105	131	26	21	47
Radiologic Technologists	347	432	85	70	155
Radiologic Technicians	185	230	45	37	82
Electroencephalograph Techs.	34	42	8	6	14
Electrocardiograph Techs.	114	142	28	19	47
Surgical Technicians	375	467	92	63	155
All Other Health Professionals, Paraprofessionals, & Technicians	625	778	153	95	248
Public Rel. Specialists & Publicity Writers	24	30	6	4	10
Photographers	17	21	4	2	6
All Other Professional, Paraprofessional, & Technical Workers	72	90	18	8	26
SALES & RELATED OCCUPATIONS	69	86	17	16	33
Cashiers	61	76	15	15	30
All Other Sales & Related Workers	8	10	2	1	3
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	5,173	6,435	1,262	1,232	2,494
First Line Supers.-Clerical & Admin. Support	183	228	45	26	71
Library Assistants & Bookmobile Drivers	14	17	3	1	4
Medical Secretaries	376	468	92	107	199
Secretaries	663	825	162	189	351
Stenographers	54	67	13	14	27
Receptionists & Information Clerks	92	114	22	23	45
Typists	387	481	94	120	214
Typists, Word Processing Equipment	68	85	17	11	28
Personnel Clerks, Exc. Payroll & Timekeeping	66	82	16	21	37
File Clerks	111	138	27	36	63
Order Clerks - Materials, Merch., & Service	25	31	6	6	12
Procurement Clerks	46	57	11	5	16
Statistical Clerks	169	210	41	42	83
Interviewing Clerks, Exc. Personnel & Welfare	517	643	126	107	233
Bookkeeping, Accounting, & Auditing Clerks	234	291	57	55	112
Payroll & Timekeeping Clerks	31	39	8	7	15
Billing, Cost, & Rate Clerks	383	476	93	95	188
General Office Clerks	533	663	130	133	263
Billing, Posting, & Calculating Machine Opers.	17	21	4	4	8
Computer Operators, Exc. Peripheral Equipment	62	77	15	7	22
Peripheral EDP Equipment Operators	15	19	4	4	8
Data Entry Keyers, Exc. Composing	141	175	34	18	52
All Other Office Machine Operators	12	15	3	4	7
Switchboard Operators	147	183	36	48	84
Dispatchers - Police, Fire, & Ambulance	36	45	9	5	14
Stock Clerks - Stockroom, Warehouse, or Yard	204	254	50	22	72
Traffic, Shipping, & Receiving Clerks	57	71	14	6	20
All Other Material Recording/Scheduling/Dist.	35	44	9	5	14
All Other Clerical & Administrative Support	495	616	121	111	232
SERVICE OCCUPATIONS	5,744	7,145	1,401	1,287	2,688
Housekeepers	98	122	24	19	43
All Service Supervisors & Managers	114	142	28	26	54

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

MARICOPA COUNTY (CONTD.)

	Estimated May 1983 Employment	Projected May 1987 Employment	Job Openings Due to Growth 1983-1987	Job Openings Due to Separations 1983-1987	Total Job Openings 1983-1987
Guards & Watch Guards	186	231	45	8	53
Food Servers, Outside	305	379	74	43	117
Dining Room/Cafeteria Attdts. & Bartdr. Helpers	15	19	4	1	5
Counter Attendants - Lunchroom, Coffee Shop, & Cafeteria	48	60	12	12	24
Bakers, Bread & Pastry	7	9	2	1	3
Cooks, Institution or Cafeteria	168	209	41	29	70
Cooks, Short Order	22	27	5	3	8
Food Preparation Workers	367	457	90	77	167
All Other Food Service Workers	191	238	47	40	87
Dental Assistants	87	108	21	29	50
Medical Assistants	251	312	61	64	125
Nursing Aides, Orderlies, & Attendants	1,725	2,146	421	426	847
Home Health Aides	41	51	10	6	16
Psychiatric Aides	165	205	40	41	81
Physical & Corrective Therapy Assists./Aides	197	245	48	50	98
Occupational Therapy Assistants & Aides	199	248	49	51	100
Ambulance Drivers & Attendants - Exc. Emergency Medical Technicians	27	34	7	3	10
Pharmacy Assistants	172	214	42	44	86
All Other Health Service Workers	215	267	52	22	74
Maids & Housekeeping Cleaners	809	1,006	197	233	430
Janitors & Cleaners, Exc. Maids & Housekeeping	197	245	48	31	79
Elevator Operators	1	1	0	0	0
All Other Cleaning/Building Service, Exc. Private House	67	83	16	10	26
Barbers	3	4	1	0	1
Hairdressers, Hairstylists, & Cosmetologists	5	6	1	1	2
Social Welfare Service Aides	3	4	1	1	2
Child Care Workers	26	32	6	8	14
All Other Service Workers	33	41	8	8	16
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	39	49	10	6	16
Gardeners & Groundskeepers, Exc. Farm	39	49	10	6	16
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	849	1,055	206	74	280
First Line Managers/Supervisors - Mechanics/Installers/Repairers	30	37	7	4	11
First Line Managers/Supervisors - Construction Trades & Extraction Workers	17	21	4	3	7
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	43	53	10	7	17
Inspectors & Related Occupations	2	2	0	0	0
Machinery Maintenance Mechanics	29	36	7	2	9
Maintenance Repairers, General Utility	180	224	44	13	57
Heating, Air Conditioning, & Refrigeration Mechanics & Installers	70	87	17	5	22
Electromedical & Biomedical Equip. Repairers	48	60	12	3	15
Menders - Garments, Linens, & Related	10	12	2	1	3
All Other Mechanics, Installers, & Repairers	19	24	5	1	6
Carpenters	32	40	8	3	11
Electricians	35	44	9	3	12
Painters & Paperhangers - Construction & Maintenance	30	37	7	3	10
Plumbers, Pipefitters, & Steamfitters	19	24	5	1	6
All Other Construction Trades Workers	20	25	5	1	6
Precision Dental Laboratory Technicians	4	5	1	0	1
All Other Precision Workers	4	5	1	0	1
Sewing Machine Operators, Non-Garment	9	11	2	1	3
Laundry/Drycleaning Mach. Opers., Exc. Pressing	60	75	15	8	23
Pressing Machine Opers. - Textile & Garments	2	2	0	0	0
Boiler Operators & Tenders, Low Pressure	5	6	1	0	1
All Machine Setters & Set-Up Operators	16	20	4	2	6
All Other Machine Operators & Tenders	5	6	1	0	1

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

MARICOPA COUNTY (CONTD.)

	Estimated May 1983 Employment	Projected May 1987 Employment	Job Openings Due to Growth 1983-1987	Job Openings Due to Separations 1983-1987	Total Job Openings 1983-1987
Sewers, Hand	1	1	0	0	0
All Other Hand Workers	10	12	2	1	3
Stationary Engineers	52	65	13	6	19
All Other Plant & System Operators	5	6	1	0	1
Truck Drivers, Light - Incl. Delivery & Route	16	20	4	1	5
All Other Motor Vehicle Operators	7	9	2	0	2
All Other Transportation & Related Workers	14	17	3	1	4
Industrial Truck & Tractor Operators	7	9	2	0	2
Helpers, Laborers, & Material Movers, Hand	48	60	12	4	16
TOTAL ALL OCCUPATIONS	29,009	36,084	7,075	6,315	13,390

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

MOHAVE COUNTY

	Estimated May 1983 Employment	Projected May 1987 Employment	Job Openings Due to Growth 1983-1987	Job Openings Due to Separations 1983-1987	Total Job Openings 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	16	18	2	1	3
Financial Managers	1	1	0	0	0
Personnel, Training, & Labor Relations Mgrs.	1	1	0	0	0
Purchasing Managers	2	2	0	0	0
Marketing, Advertising, & Public Rel. Mgrs.	1	1	0	0	0
Medicine & Health Services Managers	5	6	1	1	2
Food Service & Lodging Managers	1	1	0	0	0
General Managers & Top Executives	4	5	1	0	1
All Other Managers & Administrators	1	1	0	0	0
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	211	258	47	47	94
Accountants & Auditors	1	1	0	0	0
All Other Management Support Workers	1	1	0	0	0
Social Workers, Medical & Psychiatric	2	2	0	0	0
Physicians & Surgeons	2	2	0	0	0
Respiratory Therapists	7	9	2	1	3
Occupational Therapists	1	1	0	0	0
Physical Therapists	3	4	1	0	1
Speech Pathologists & Audiologists	1	1	0	0	0
Registered Nurses	85	105	20	21	41
Licensed Practical Nurses	53	65	12	15	27
Physician Assistants	1	1	0	0	0
Pharmacists	2	2	0	0	0
Dietitians & Nutritionists	1	1	0	0	0
Medical & Clinical Laboratory Technologists	15	18	3	3	6
Medical & Clinical Laboratory Technicians	7	9	2	1	3
Medical Records Technicians & Technologists	6	7	1	2	3
Radiologic Technicians	12	15	3	2	5
Surgical Technicians	4	5	1	1	2
All Other Health Professionals, Paraprofessionals, & Technicians	7	9	2	1	3
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	93	113	20	20	40
First Line Supers.-Clerical & Admin. Support	2	2	0	0	0
Medical Secretaries	1	1	0	0	0
All Other Secretaries	9	11	2	3	5
Typists	11	14	3	4	7
Personnel Clerks, Exc. Payroll & Timekeeping	1	1	0	0	0
Statistical Clerks	1	1	0	0	0
Interviewing Clerks, Exc. Personnel & Welfare	10	12	2	2	4
Bookkeeping, Accounting, & Auditing Clerks	11	14	3	3	6
Payroll & Timekeeping Clerks	1	1	0	0	0
Billing, Cost, & Rate Clerks	9	11	2	2	4
General Office Clerks	15	18	3	4	7
Computer Operators, Exc. Peripheral Equipment	3	4	1	0	1
Data Entry Keyers, Exc. Composing	3	4	1	0	1
All Other Office Machine Operators	1	1	0	0	0
Switchboard Operators	1	1	0	0	0
Stock Clerks - Stockroom, Warehouse, or Yard	4	5	1	0	1
Traffic, Shipping, & Receiving Clerks	1	1	0	0	0
All Other Clerical & Administrative Support	9	11	2	2	4
SERVICE OCCUPATIONS	144	177	33	31	64
Housekeepers	2	2	0	0	0
All Service Supervisors & Managers	1	1	0	0	0
Food Servers, Outside	11	14	3	1	4
Cooks, Institution or Cafeteria	9	11	2	2	4
Food Preparation Workers	9	11	2	2	4
All Other Food Service Workers	15	18	3	3	6
Nursing Aides, Orderlies, & Attendants	67	83	16	16	32
Physical & Corrective Therapy Assists./Aides	2	2	0	0	0
All Other Health Service Workers	3	4	1	0	1
Maids & Housekeeping Cleaners	20	25	5	6	11
Janitors & Cleaners, Exc. Maids & Housekeeping	5	6	1	1	2

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

MOHAVE COUNTY (CONTD.)

	Estimated May 1983 Employment	Projected May 1987 Employment	Job Openings Due to Growth 1983-1987	Job Openings Due to Separations 1983-1987	Total Job Openings 1983-1987
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	28	35	7	2	9
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	1	1	0	0	0
Maintenance Repairers, General Utility	12	15	3	1	4
Laundry/Drycleaning Mach. Opers., Exc. Pressing	11	14	3	1	4
Boiler Operators & Tenders, Low Pressure	4	5	1	0	1
TOTAL ALL OCCUPATIONS	492	601	109	101	210

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

NAVAJO COUNTY

	Estimated May 1983 Employment	Projected May 1987 Employment	Job Opening Due to Growth 1983-1987	Job Openings Due to Separations 1983-1987	Total Job Openings 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	30	37	7	3	10
Financial Managers	3	4	1	0	1
Purchasing Managers	2	2	0	0	0
Administrative Services Managers	3	4	1	0	1
Medicine & Health Services Managers	17	21	4	3	7
General Managers & Top Executives	4	5	1	0	1
All Other Managers & Administrators	1	1	0	0	0
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	335	412	77	71	148
Budget Analysts	2	2	0	0	0
Purchasing Agents, Exc. Wholesale, Retail, & Farm	2	2	0	0	0
Psychologists	1	1	0	0	0
Social Workers, Medical & Psychiatric	5	6	1	1	2
Social Service Technicians	3	4	1	0	1
Nursing Instructors	1	1	0	0	0
Teachers & Instructors, Voc. Ed. & Training	1	1	0	0	0
Physicians & Surgeons	21	26	5	3	8
Dentists	6	7	1	0	1
Respiratory Therapists	3	4	1	0	1
Physical Therapists	3	4	1	0	1
Registered Nurses	141	174	33	34	67
Licensed Practical Nurses	53	65	12	15	27
Physician Assistants	3	4	1	1	2
Pharmacists	14	17	3	2	5
Dietitians & Nutritionists	5	6	1	1	2
Dietetic Technicians	1	1	0	0	0
Medical & Clinical Laboratory Technologists	17	21	4	4	8
Medical & Clinical Laboratory Technicians	8	10	2	1	3
Dental Hygienists	3	4	1	1	2
Medical Records Technicians & Technologists	16	20	4	5	9
Radiologic Technologists	1	1	0	0	0
Radiologic Technicians	12	15	3	2	5
Surgical Technicians	3	4	1	0	1
All Other Health Professionals, Paraprofessionals, & Technicians	10	12	2	1	3
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	91	110	19	19	38
First Line Supers.-Clerical & Admin. Support	4	5	1	1	2
Medical Secretaries	2	2	0	1	1
All Other Secretaries	8	10	2	2	4
Typists	8	10	2	2	4
File Clerks	1	1	0	0	0
Order Clerks - Materials, Merch., & Service	3	4	1	1	2
Procurement Clerks	1	1	0	0	0
Interviewing Clerks, Exc. Personnel & Welfare	12	15	3	2	5
Bookkeeping, Accounting, & Auditing Clerks	2	2	0	0	0
Payroll & Timekeeping Clerks	1	1	0	0	0
Billing, Cost, & Rate Clerks	12	15	3	3	6
General Office Clerks	5	6	1	1	2
Computer Operators, Exc. Peripheral Equipment	2	2	0	0	0
Data Entry Keyers, Exc. Composing	1	1	0	0	0
Switchboard Operators	6	7	1	2	3
Stock Clerks - Stockroom, Warehouse, or Yard	4	5	1	0	1
All Other Clerical & Administrative Support	19	23	4	4	8
SERVICE OCCUPATIONS	115	142	27	26	53
Housekeepers	3	4	1	1	2
All Service Supervisors & Managers	3	4	1	1	2
Cooks, Institution or Cafeteria	19	23	4	3	7
Food Preparation Workers	11	14	3	2	5
Dental Assistants	8	10	2	3	5
Nursing Aides, Orderlies, & Attendants	38	47	9	9	18
Physical & Corrective Therapy Assists./Aides	2	2	0	0	0

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

NAVAJO COUNTY (CONTD.)

	Estimated May 1983 Employment	Projected May 1987 Employment	Job Openings Due to Growth 1983-1987	Job Openings Due to Separations 1983-1987	Total Job Openings 1983-1987
Pharmacy Assistants	2	2	0	0	0
Maids & Housekeeping Cleaners	20	25	5	6	11
Janitors & Cleaners, Exc. Maids & Housekeeping	9	11	2	1	3
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	42	50	8	1	9
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	1	1	0	0	0
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	2	2	0	0	0
Maintenance Repairers, General Utility	21	26	5	1	6
Heating, Air Conditioning, & Refrigeration Mechanics & Installers	1	1	0	0	0
Electromedical & Biomedical Equip. Repairers	1	1	0	0	0
Electricians	1	1	0	0	0
Sewers, Hand	1	1	0	0	0
Truck Drivers, Light - Incl. Delivery & Route	9	11	2	0	2
Helpers, Laborers, & Material Movers, Hand	5	6	1	0	1
TOTAL ALL OCCUPATIONS	613	751	138	120	258

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

PIMA COUNTY

	Estimated May 1983 Employment	Projected May 1987 Employment	Job Openings Due to Growth 1983-1987	Job Openings Due to Separations 1983-1987	Total Job Openings 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	476	548	72	65	137
Financial Managers	19	22	3	3	6
Personnel, Training, & Labor Relations Mgrs.	22	25	3	3	6
Purchasing Managers	11	13	2	1	3
Marketing, Advertising, & Public Rel. Mgrs.	9	10	1	1	2
Administrative Services Managers	12	14	2	2	4
Medicine & Health Services Managers	123	142	19	21	40
Food Service & Lodging Managers	18	21	3	3	6
General Managers & Top Executives	102	117	15	12	27
All Other Managers & Administrators	160	184	24	19	43
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	5,574	6,412	838	1,190	2,028
Accountants & Auditors	7	8	1	1	2
Budget Analysts	9	10	1	1	2
Purchasing Agents, Exc. Wholesale, Retail, & Farm	9	10	1	1	2
Personnel, Training, & Labor Rel. Specialists	22	25	3	2	5
All Other Management Support Workers	25	29	4	3	7
Electrical & Electronic Engineers	1	1	0	0	0
Mechanical Engineers	1	1	0	0	0
All Other Engineers	1	1	0	0	0
Civil Engineering technicians and Technologists	1	1	0	0	0
Electrical/Electronic Engineering Technicians	2	2	0	0	0
Drafters	1	1	0	0	0
All Other Engineering & Related Technicians	2	2	0	0	0
Chemists, Exc. Biochemists	1	1	0	0	0
Biological Scientists	18	21	3	2	5
Medical Scientists	15	17	2	2	4
Biological, Agri., & Food Techs., Exc. Health	10	12	2	1	3
All Other Physical & Life Science Techs.	1	1	0	0	0
Systems Analysts, Electronic Data Processing	2	2	0	0	0
Computer Programmers	17	20	3	1	4
Computer Programmer Aides	2	2	0	0	0
Psychologists	2	2	0	0	0
Social Workers, Medical & Psychiatric	101	116	15	20	35
Social Workers, Exc. Medical & Psychiatric	5	6	1	1	2
Social Service Technicians	22	25	3	3	6
Clergy	14	16	2	2	4
Nursing Instructors	24	28	4	3	7
All Other Teachers & Instructors	2	2	0	0	0
Librarians, Professional	7	8	1	2	3
Technical Assistants, Library	2	2	0	0	0
Physicians & Surgeons	409	471	62	49	111
Dentists	2	2	0	0	0
Optometrists	1	1	0	0	0
Podiatrists	1	1	0	0	0
Respiratory Therapists	168	193	25	29	54
Occupational Therapists	18	21	3	3	6
Physical Therapists	74	85	11	13	24
Corrective & Manual Arts Therapists	2	2	0	0	0
Speech Pathologists & Audiologists	13	15	2	2	4
Recreational Therapists	6	7	1	1	2
Registered Nurses	2,892	3,329	437	683	1,120
Licensed Practical Nurses	635	731	96	175	271
Emergency Medical Technicians	5	6	1	1	2
Physician Assistants	9	10	1	2	3
Pharmacists	129	148	19	23	42
Dietitians & Nutritionists	38	44	6	9	15
Dietetic Technicians	23	26	3	5	8
Medical & Clinical Laboratory Technologists	303	349	46	64	110
Medical & Clinical Laboratory Technicians	71	82	11	11	22
Dental Hygienists	1	1	0	0	0
Medical Records Technicians & Technologists	43	49	6	14	20
Nuclear Medicine Technologists	19	22	3	4	7

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

PIMA COUNTY (CONTD.)

	Estimated May 1983 Employment	Projected May 1987 Employment	Job Openings Due to Growth 1983-1987	Job Openings Due to Separations 1983-1987	Total Job Openings 1983-1987
Radiologic Technologists	156	180	24	30	54
Radiologic Technicians	15	17	2	3	5
Electroencephalograph Techs.	15	17	2	2	4
Electrocardiograph Techs.	37	43	6	6	12
Surgical Technicians	91	105	14	6	20
All Other Health Professionals, Paraprofessionals, & Technicians	47	54	7	7	14
Public Rel. Specialists & Publicity Writers	11	13	2	2	4
Photographers	5	6	1	0	1
All Other Professional, Paraprofessional, & Technical Workers	9	10	1	1	2
SALES & RELATED OCCUPATIONS	17	20	3	2	5
Cashiers	17	20	3	2	5
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	1,834	2,111	277	410	687
First Line Supers.-Clerical & Admin. Support	98	113	15	14	29
Medical Secretaries	83	96	13	23	36
All Other Secretaries	131	151	20	36	56
Stenographers	7	8	1	2	3
Receptionists & Information Clerks	35	40	5	8	13
Typists	139	160	21	41	62
Personnel Clerks, Exc. Payroll & Timekeeping	23	26	3	7	10
File Clerks	31	36	5	9	14
Order Clerks - Materials, Merch., & Service	13	15	2	3	5
Procurement Clerks	21	24	3	2	5
Statistical Clerks	65	75	10	16	26
Interviewing Clerks, Exc. Personnel & Welfare	124	143	19	23	42
Bookkeeping, Accounting, & Auditing Clerks	42	48	6	9	15
Payroll & Timekeeping Clerks	12	14	2	2	4
Billing, Cost, & Rate Clerks	82	94	12	19	31
General Office Clerks	400	460	60	95	155
Computer Operators, Exc. Peripheral Equipment	10	12	2	1	3
Peripheral EDP Equipment Operators	6	7	1	1	2
Data Entry Keyers, Exc. Composing	49	56	7	6	13
All Other Office Machine Operators	3	3	0	1	1
Switchboard Operators	77	89	12	24	36
Dispatchers - Police, Fire, & Ambulance	7	8	1	1	2
Stock Clerks - Stockroom, Warehouse, or Yard	109	125	16	11	27
Traffic, Shipping, & Receiving Clerks	10	12	2	1	3
All Other Material Recording/Scheduling/Dist.	1	1	0	0	0
All Other Clerical & Administrative Support	256	295	39	55	94
SERVICE OCCUPATIONS	2,252	2,594	342	498	840
Housekeepers	136	157	21	25	46
All Service Supervisors & Managers	44	51	7	10	17
Guards & Watch Guards	39	45	6	2	8
Waiters & Waitresses	4	5	1	1	2
Food Servers, Outside	81	93	12	11	23
Dining Room/Cafeteria Attdts. & Bartdr. Helpers	62	71	9	2	11
Counter Attendants - Lunchroom, Coffee Shop, & Cafeteria	10	12	2	2	4
Bakers, Bread & Pastry	8	9	1	1	2
Cooks, Institution or Cafeteria	77	89	12	13	25
Cooks, Short Order	1	1	0	0	0
Food Preparation Workers	162	186	24	33	57
All Other Food Service Workers	66	76	10	13	23
Dental Assistants	5	6	1	2	3
Medical Assistants	96	110	14	23	37
Nursing Aides, Orderlies, & Attendants	746	859	113	187	300
Psychiatric Aides	30	35	5	7	12
Physical & Corrective Therapy Assists./Aides	22	25	3	5	8
Occupational Therapy Assistants & Aides	1	1	0	0	0
Ambulance Drivers & Attendants - Exc. Emergency Medical Technicians	10	12	2	1	3

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

PIMA COUNTY (CONTD.)

	Estimated May 1983 Employment	Projected May 1987 Employment	Job Openings Due to Growth 1983-1987	Job Openings Due to Separations 1983-1987	Total Job Openings 1983-1987
Pharmacy Assistants	74	85	11	18	29
All Other Health Service Workers	27	31	4	3	7
Maids & Housekeeping Cleaners	421	485	64	117	181
Janitors & Cleaners, Exc. Maids & Housekeeping	103	119	16	16	32
Barbers	1	1	0	0	0
All Other Service Workers	26	30	4	6	10
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	27	31	4	4	8
Gardeners & Groundskeepers, Exc. Farm	24	28	4	4	8
All Other Agri., Forestry, Fishing, & Related	3	3	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	331	379	48	27	75
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	16	18	2	2	4
First Line Managers/Supervisors - Construction Trades & Extraction Workers	9	10	1	1	2
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	5	6	1	1	2
Machinery Maintenance Mechanics	5	6	1	0	1
Maintenance Repairers, General Utility	39	45	6	3	9
Heating, Air Conditioning, & Refrigeration Mechanics & Installers	27	31	4	2	6
Electromedical & Biomedical Equip. Repairers	8	9	1	0	1
All Other Mechanics, Installers, & Repairers	2	2	0	0	0
Carpenters	32	37	5	3	8
Electricians	26	30	4	2	6
Painters & Paperhangers - Construction & Maintenance	18	21	3	2	5
Plumbers, Pipefitters, & Steamfitters	20	23	3	1	4
All Other Construction Trades Workers	6	7	1	0	1
Machinists	3	3	0	0	0
Precision Dental Laboratory Technicians	2	2	0	0	0
Medical Appliance Makers	1	1	0	0	0
All Other Precision Workers	3	3	0	0	0
Sewing Machine Operators, Non-Garment	1	1	0	0	0
Laundry/Drycleaning Mach. Opers., Exc. Pressing	36	41	5	5	10
Boiler Operators & Tenders, Low Pressure	8	9	1	0	1
All Other Machine Operators & Tenders	1	1	0	0	0
Sewers, Hand	2	2	0	0	0
Stationary Engineers	30	35	5	3	8
Truck Drivers, Light - Incl. Delivery & Route	6	7	1	0	1
All Other Motor Vehicle Operators	10	12	2	1	3
Industrial Truck & Tractor Operators	1	1	0	0	0
Helpers, Laborers, & Material Movers, Hand	14	16	2	1	3
TOTAL ALL OCCUPATIONS	10,511	12,095	1,584	2,196	3,780

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

PINAL COUNTY

	Estimated May 1983 Employment	Projected May 1987 Employment	Job Openings Due to Growth 1983-1987	Job Openings Due to Separations 1983-1987	Total Job Openings 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	30	36	6	3	9
Financial Managers	1	1	0	0	0
Personnel, Training, & Labor Relations Mgrs.	2	2	0	0	0
Purchasing Managers	1	1	0	0	0
Marketing, Advertising, & Public Rel. Mgrs.	1	1	0	0	0
Administrative Services Managers	8	10	2	1	3
Medicine & Health Services Managers	9	11	2	2	4
Food Service & Lodging Managers	1	1	0	0	0
General Managers & Top Executives	4	5	1	0	1
All Other Managers & Administrators	3	4	1	0	1
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	304	372	68	71	139
Budget Analysts	2	2	0	0	0
Purchasing Agents, Exc. Wholesale, Retail, & Farm	1	1	0	0	0
Personnel, Training, & Labor Rel. Specialists	1	1	0	0	0
Mechanical Engineers	1	1	0	0	0
Psychologists	1	1	0	0	0
Social Workers, Medical & Psychiatric	3	4	1	1	2
Physicians & Surgeons	12	15	3	1	4
Dentists	1	1	0	0	0
Recreational Therapists	1	1	0	0	0
Registered Nurses	157	193	36	38	74
Licensed Practical Nurses	56	69	13	16	29
Physician Assistants	1	1	0	0	0
Pharmacists	9	11	2	2	4
Dietitians & Nutritionists	3	4	1	1	2
Medical & Clinical Laboratory Technologists	19	23	4	4	8
Medical & Clinical Laboratory Technicians	17	21	4	3	7
Medical Records Technicians & Technologists	6	7	1	2	3
Radiologic Technologists	8	10	2	2	4
Radiologic Technicians	3	4	1	1	2
Surgical Technicians	1	1	0	0	0
All Other Health Professionals, Paraprofessionals, & Technicians	1	1	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	86	105	19	17	36
First Line Supers.-Clerical & Admin. Support	3	4	1	0	1
Medical Secretaries	1	1	0	0	0
All Other Secretaries	3	4	1	1	2
Stenographers	1	1	0	0	0
Receptionists & Information Clerks	3	4	1	1	2
Typists	9	11	2	2	4
Order Clerks - Materials, Merch., & Service	2	2	0	0	0
Bookkeeping, Accounting, & Auditing Clerks	15	18	3	3	6
Billing, Cost, & Rate Clerks	3	4	1	1	2
General Office Clerks	5	6	1	1	2
Data Entry Keyers, Exc. Composing	2	2	0	0	0
Switchboard Operators	3	4	1	1	2
Stock Clerks - Stockroom, Warehouse, or Yard	7	9	2	1	3
Traffic, Shipping, & Receiving Clerks	2	2	0	0	0
All Other Clerical & Administrative Support	27	33	6	6	12
SERVICE OCCUPATIONS	184	224	40	42	82
Housekeepers	2	2	0	0	0
All Service Supervisors & Managers	2	2	0	0	0
Food Servers, Outside	1	1	0	0	0
Cooks, Institution or Cafeteria	8	10	2	1	3
Food Preparation Workers	32	39	7	6	13
Dental Assistants	2	2	0	1	1
Medical Assistants	23	28	5	6	11
Nursing Aides, Orderlies, & Attendants	69	85	16	17	33
Physical & Corrective Therapy Assists./Aides	1	1	0	0	0
Pharmacy Assistants	8	10	2	2	4

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

PINAL COUNTY (CONTD.)

	Estimated May 1983 Employment	Projected May 1987 Employment	Job Openings Due to Growth 1983-1987	Job Openings Due to Separations 1983-1987	Total Job Openings 1983-1987
Maids & Housekeeping Cleaners	30	37	7	8	15
Janitors & Cleaners, Exc. Maids & Housekeeping	6	7	1	1	2
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	1	1	0	0	0
Gardeners & Groundskeepers, Exc. Farm	1	1	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	12	14	2	0	2
First Line Managers/Supervisors - Mechanics/Installers/Repairers	1	1	0	0	0
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	1	1	0	0	0
Maintenance Repairers, General Utility	6	7	1	0	1
Stationary Engineers	4	5	1	0	1
TOTAL ALL OCCUPATIONS	617	752	135	133	268

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

SANTA CRUZ COUNTY

	Estimated May 1983 Employment	Projected May 1987 Employment	Job Openings Due to Growth 1983-1987	Job Openings Due to Separations 1983-1987	Total Job Openings 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	3	3	0	0	0
Food Service & Lodging Managers	1	1	0	0	0
General Managers & Top Executives	2	2	0	0	0
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	98	117	19	21	40
Purchasing Agents, Exc. Wholesale, Retail, & Farm	1	1	0	0	0
Personnel, Training, & Labor Rel. Specialists	1	1	0	0	0
Compliance & Enforcement Inspectors, Exc. Const.	1	1	0	0	0
Social Workers, Medical & Psychiatric	1	1	0	0	0
Social Service Technicians	1	1	0	0	0
Clergy	1	1	0	0	0
Respiratory Therapists	1	1	0	0	0
Physical Therapists	1	1	0	0	0
Recreational Therapists	1	1	0	0	0
Registered Nurses	56	69	13	11	24
Licensed Practical Nurses	18	22	4	4	8
Emergency Medical Technicians	2	2	0	0	0
Pharmacists	1	1	0	0	0
Dietitians & Nutritionists	1	1	0	0	0
Medical & Clinical Laboratory Technologists	3	4	1	1	2
Medical & Clinical Laboratory Technicians	4	5	1	1	2
Medical Records Technicians & Technologists	1	1	0	0	0
Radiologic Technicians	2	2	0	0	0
Electrocardiograph Techs.	1	1	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	14	15	1	1	2
First Line Supers.-Clerical & Admin. Support	1	1	0	0	0
Medical Secretaries	1	1	0	0	0
Receptionists & Information Clerks	2	2	0	0	0
File Clerks	1	1	0	0	0
Interviewing Clerks, Exc. Personnel & Welfare	1	1	0	0	0
Billing, Cost, & Rate Clerks	1	1	0	0	0
General Office Clerks	1	1	0	0	0
Switchboard Operators	1	1	0	0	0
Stock Clerks - Stockroom, Warehouse, or Yard	1	1	0	0	0
All Other Clerical & Administrative Support	4	5	1	1	2
SERVICE OCCUPATIONS	50	60	10	10	20
Housekeepers	1	1	0	0	0
All Service Supervisors & Managers	1	1	0	0	0
Cooks, Institution or Cafeteria	4	5	1	1	2
Food Preparation Workers	7	9	2	1	3
All Other Food Service Workers	1	1	0	0	0
Nursing Aides, Orderlies, & Attendants	28	34	6	7	13
Physical & Corrective Therapy Assists./Aides	1	1	0	0	0
Maids & Housekeeping Cleaners	4	5	1	1	2
Janitors & Cleaners, Exc. Maids & Housekeeping	1	1	0	0	0
All Other Service Workers	2	2	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	3	3	0	0	0
Maintenance Repairers, General Utility	3	3	0	0	0
TOTAL ALL OCCUPATIONS	168	198	30	32	62

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

YAVAPAI COUNTY

	Estimated May 1983 Employment	Projected May 1987 Employment	Job Openings Due to Growth 1983-1987	Job Openings Due to Separations 1983-1987	Total Job Openings 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	55	67	12	7	19
Financial Managers	5	6	1	1	2
Personnel, Training, & Labor Relations Mgrs.	4	5	1	1	2
Purchasing Managers	3	4	1	0	1
Marketing, Advertising, & Public Rel. Mgrs.	1	1	0	0	0
Administrative Services Managers	1	1	0	0	0
Medicine & Health Services Managers	14	17	3	2	5
Food Service & Lodging Managers	2	2	0	0	0
General Managers & Top Executives	5	6	1	1	2
All Other Managers & Administrators	20	25	5	2	7
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	570	700	130	112	242
Accountants & Auditors	1	1	0	0	0
Purchasing Agents, Exc. Wholesale, Retail, & Farm	4	5	1	0	1
Personnel, Training, & Labor Rel. Specialists	2	2	0	0	0
Compliance & Enforcement Inspectors, Exc. Const.	1	1	0	0	0
All Other Management Support Workers	4	5	1	0	1
Mechanical Engineers	2	2	0	0	0
All Other Engineering & Related Technicians	1	1	0	0	0
Biological Scientists	1	1	0	0	0
Computer Programmers	2	2	0	0	0
Psychologists	3	4	1	0	1
Social Workers, Medical & Psychiatric	11	14	3	2	5
Social Service Technicians	8	10	2	1	3
Clergy	3	4	1	0	1
Nursing Instructors	3	4	1	0	1
Librarians, Professional	1	1	0	0	0
Technical Assistants, Library	1	1	0	0	0
Physicians & Surgeons	23	28	5	3	8
Dentists	3	4	1	0	1
Respiratory Therapists	18	22	4	3	7
Occupational Therapists	4	5	1	1	2
Physical Therapists	6	7	1	1	2
Corrective & Manual Arts Therapists	2	2	0	0	0
Recreational Therapists	2	2	0	0	0
Registered Nurses	280	345	65	61	126
Licensed Practical Nurses	72	89	17	20	37
Pharmacists	14	17	3	2	5
Dietitians & Nutritionists	7	9	2	2	4
Medical & Clinical Laboratory Technologists	14	17	3	3	6
Medical & Clinical Laboratory Technicians	25	31	6	4	10
Medical Records Technicians & Technologists	2	2	0	1	1
Nuclear Medicine Technologists	3	4	1	1	2
Radiologic Technologists	12	15	3	2	5
Radiologic Technicians	5	6	1	1	2
Electrocardiograph Techs.	2	2	0	0	0
Surgical Technicians	11	14	3	2	5
All Other Health Professionals, Paraprofessionals, & Technicians	16	20	4	2	6
All Other Professional, Paraprofessional, & Technical Workers	1	1	0	0	0
SALES & RELATED OCCUPATIONS	4	5	1	1	2
Cashiers	4	5	1	1	2
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	190	233	43	44	87
First Line Supers.-Clerical & Admin. Support	4	5	1	1	2
Medical Secretaries	27	33	6	8	14
All Other Secretaries	20	25	5	6	11
Typists	30	37	7	9	16
Personnel Clerks, Exc. Payroll & Timekeeping	4	5	1	1	2
File Clerks	4	5	1	1	2
Procurement Clerks	1	1	0	0	0

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

YAVAPAI COUNTY (CONTD.)

	Estimated May 1983 Employment	Projected May 1987 Employment	Job Openings Due to Growth 1983-1987	Job Openings Due to Separations 1983-1987	Total Job Openings 1983-1987
Statistical Clerks	6	7	1	1	2
Interviewing Clerks, Exc. Personnel & Welfare	13	16	3	2	5
Bookkeeping, Accounting, & Auditing Clerks	9	11	2	2	4
Payroll & Timekeeping Clerks	2	2	0	0	0
Billing, Cost, & Rate Clerks	11	14	3	3	6
General Office Clerks	14	17	3	3	6
Billing, Posting, & Calculating Machine Opers.	6	7	1	1	2
Computer Operators, Exc. Peripheral Equipment	4	5	1	0	1
Data Entry Keyers, Exc. Composing	4	5	1	0	1
Switchboard Operators	9	11	2	3	5
Stock Clerks - Stockroom, Warehouse, or Yard	10	12	2	1	3
All Other Material Recording/Scheduling/Dist.	1	1	0	0	0
All Other Clerical & Administrative Support	11	14	3	2	5
SERVICE OCCUPATIONS	309	381	72	70	142
Housekeepers	5	6	1	1	2
Guards & Watch Guards	9	11	2	0	2
Food Servers, Outside	7	9	2	1	3
Cooks, Institution or Cafeteria	14	17	3	2	5
Cooks, Short Order	8	10	2	1	3
Food Preparation Workers	66	81	15	14	29
Dental Assistants	3	4	1	1	2
Medical Assistants	3	4	1	1	2
Nursing Aides, Orderlies, & Attendants	112	138	26	27	53
Physical & Corrective Therapy Assists./Aides	3	4	1	1	2
Pharmacy Assistants	9	11	2	2	4
All Other Health Service Workers	5	6	1	0	1
Maids & Housekeeping Cleaners	65	80	15	19	34
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	1	1	0	0	0
Gardeners & Groundskeepers, Exc. Farm	1	1	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	60	70	10	4	14
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	5	6	1	1	2
Maintenance Repairers, General Utility	14	17	3	1	4
Heating, Air Conditioning, & Refrigeration Mechanics & Installers	1	1	0	0	0
Electromedical & Biomedical Equip. Repairers	5	6	1	0	1
Carpenters	2	2	0	0	0
Electricians	4	5	1	0	1
Painters & Paperhangers - Construction & Maintenance	2	2	0	0	0
Plumbers, Pipefitters, & Steamfitters	2	2	0	0	0
All Other Construction Trades Workers	1	1	0	0	0
Precision Dental Laboratory Technicians	1	1	0	0	0
Sewing Machine Operators, Non-Garment	1	1	0	0	0
Laundry/Drycleaning Mach. Opers., Exc. Pressing	5	6	1	1	2
Boiler Operators & Tenders, Low Pressure	6	7	1	1	2
Truck Drivers, Light - Incl. Delivery & Route	5	6	1	0	1
Industrial Truck & Tractor Operators	1	1	0	0	0
Helpers, Laborers, & Material Movers, Hand	5	6	1	0	1
TOTAL ALL OCCUPATIONS	1,189	1,457	268	238	506

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

YUMA COUNTY

	Estimated May 1983 Employment	Projected May 1987 Employment	Job Openings Due to Growth 1983-1987	Job Openings Due to Separations 1983-1987	Total Job Openings 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	24	28	4	3	7
Financial Managers	1	1	0	0	0
Personnel, Training, & Labor Relations Mgrs.	1	1	0	0	0
Purchasing Managers	1	1	0	0	0
Administrative Services Managers	2	2	0	0	0
Medicine & Health Services Managers	5	6	1	1	2
Food Service & Lodging Managers	1	1	0	0	0
General Managers & Top Executives	7	9	2	1	3
All Other Managers & Administrators	6	7	1	1	2
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	423	521	98	98	196
Purchasing Agents, Exc. Wholesale, Retail, & Farm	1	1	0	0	0
Personnel, Training, & Labor Rel. Specialists	1	1	0	0	0
Electrical/Electronic Engineering Technicians	2	2	0	0	0
Biological Scientists	3	4	1	0	1
Systems Analysts, Electronic Data Processing	2	2	0	0	0
Computer Programmers	1	1	0	0	0
Computer Programmer Aides	1	1	0	0	0
Social Workers, Medical & Psychiatric	1	1	0	0	0
Clergy	3	4	1	0	1
Nursing Instructors	3	4	1	0	1
All Other Teachers & Instructors	2	2	0	0	0
Librarians, Professional	1	1	0	0	0
Technical Assistants, Library	1	1	0	0	0
Physicians & Surgeons	6	8	2	1	3
Dentists	2	2	0	0	0
Respiratory Therapists	6	8	2	1	3
Registered Nurses	159	196	37	39	76
Licensed Practical Nurses	122	150	28	35	63
Pharmacists	6	8	2	1	3
Dietitians & Nutritionists	3	4	1	1	2
Dietetic Technicians	1	1	0	0	0
Medical & Clinical Laboratory Technologists	32	39	7	7	14
Medical & Clinical Laboratory Technicians	11	14	3	2	5
Medical Records Technicians & Technologists	20	25	5	6	11
Nuclear Medicine Technologists	1	1	0	0	0
Radiologic Technologists	12	15	3	2	5
Electroencephalograph Techs.	2	2	0	0	0
Electrocardiograph Techs.	4	5	1	1	2
Surgical Technicians	6	8	2	1	3
All Other Health Professionals, Paraprofessionals, & Technicians	7	9	2	1	3
Public Rel. Specialists & Publicity Writers	1	1	0	0	0
SALES & RELATED OCCUPATIONS	5	6	1	1	2
Cashiers	5	6	1	1	2
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	231	283	52	51	103
First Line Supers.-Clerical & Admin. Support	37	45	8	5	13
Library Assistants & Bookmobile Drivers	1	1	0	0	0
Medical Secretaries	4	5	1	1	2
All Other Secretaries	6	7	1	2	3
Typists	7	9	2	2	4
Typists, Word Processing Equipment	6	7	1	1	2
Personnel Clerks, Exc. Payroll & Timekeeping	7	9	2	3	5
File Clerks	1	1	0	0	0
Statistical Clerks	9	11	2	2	4
Interviewing Clerks, Exc. Personnel & Welfare	11	14	3	2	5
Bookkeeping, Accounting, & Auditing Clerks	2	3	1	1	2
Payroll & Timekeeping Clerks	2	2	0	0	0
Billing, Cost, & Rate Clerks	18	22	4	5	9
General Office Clerks	80	99	19	20	39
Computer Operators, Exc. Peripheral Equipment	2	3	1	0	1

ESTIMATED EMPLOYMENT AND JOB OPENINGS
HOSPITALS

YUMA COUNTY (CONTD.)

	Estimated May 1983 Employment	Projected May 1987 Employment	Job Openings Due to Growth 1983-1987	Job Openings Due to Separations 1983-1987	Total Job Openings 1983-1987
Data Entry Keyers, Exc. Composing	4	5	1	1	2
Switchboard Operators	6	7	1	2	3
Stock Clerks - Stockroom, Warehouse, or Yard	2	2	0	0	0
Traffic, Shipping, & Receiving Clerks	1	1	0	0	0
All Other Material Recording/Scheduling/Dist.	10	12	2	1	3
All Other Clerical & Administrative Support	15	18	3	3	6
SERVICE OCCUPATIONS	210	256	46	42	88
Housekeepers	2	2	0	0	0
All Service Supervisors & Managers	4	5	1	1	2
Guards & Watch Guards	8	10	2	0	2
Cooks, Institution or Cafeteria	8	10	2	2	4
Food Preparation Workers	28	34	6	6	12
All Other Food Service Workers	3	4	1	1	2
Dental Assistants	2	2	0	0	0
Nursing Aides, Orderlies, & Attendants	86	106	20	21	41
Psychiatric Aides	1	1	0	0	0
Pharmacy Assistants	2	2	0	0	0
All Other Health Service Workers	32	39	7	3	10
Maids & Housekeeping Cleaners	29	35	6	8	14
Janitors & Cleaners, Exc. Maids & Housekeeping	3	4	1	0	1
All Other Cleaning/Building Service, Exc. Private House	2	2	0	0	0
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	2	2	0	0	0
Gardeners & Groundskeepers, Exc. Farm	2	2	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	25	29	4	1	5
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	1	1	0	0	0
First Line Managers/Supervisors - Construction Trades & Extraction Workers	1	1	0	0	0
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	3	4	1	0	1
Maintenance Repairers, General Utility	11	14	3	1	4
Heating, Air Conditioning, & Refrigeration Mechanics & Installers	2	2	0	0	0
Electromedical & Biomedical Equip. Repairers	2	2	0	0	0
Menders - Garments, Linens, & Related	1	1	0	0	0
Boiler Operators & Tenders, Low Pressure	1	1	0	0	0
All Other Motor Vehicle Operators	1	1	0	0	0
Helpers, Laborers, & Material Movers, Hand	2	2	0	0	0
TOTAL ALL OCCUPATIONS	920	1,125	205	196	401

METHODOLOGY

Sample Selection and Response Rates

Using standardized survey forms provided by the Department of Labor, a survey of all Arizona hospitals was conducted. A positive response from each of the 91 hospitals yielded a 100 percent response rate.

Employment Projections

Projecting occupational employment and demand is accomplished in two basic stages. First, total hospital employment is estimated for the target years. These forecasts are computed using an econometric model driven by forecast values for variables such as national unemployment, interest rates, and industrial production. Staffing pattern ratios, as determined by the OES survey are then applied to the industry employment projections and represents the second stage of the forecasting methodology.

Employment data reflects full or part-time workers, workers on paid leave, and workers on unpaid short-term absences, e.g., sick leave, temporary layoff, and jury duty. Also included are salaried officers, executives, and staff of incorporated firms. Workers performing tasks related to two or more occupations are classified according to their highest level of skill.

Job Openings

"Total Job Openings" represents the sum of openings resulting from expansion and replacement during the projection period. Expansion is the numerical difference in employment for a given period. Replacement represents job openings that transpire due to separations from the labor force, i.e., death, retirement, and pregnancy, and is based on national occupational separation rates[1]. The "Total Job Openings" column does not account for labor turnover, i.e., openings created when a worker changes jobs, leaving the job to be filled by someone else. These vacancies are generally the largest source of job openings.

Limitations of the Data

The projection method does not account for cyclical, seasonal, and such external factors as sudden discontinuations or initiations of major government programs.

Employment forecasts for the nonmetropolitan counties are based on growth rates developed for the "balance of state" (Arizona less Maricopa and Pima counties) rather than for individual counties.

---

[1] "Tomorrow's Manpower Needs," Supplement No. 4, BLS, 1974, pp. 11-16.

LABOR MARKET INFORMATION PUBLICATIONS
OCCUPATIONAL EMPLOYMENT STATISTICS
BOX 6123, SITE CODE 733A
PHOENIX, ARIZONA 85005

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
EMPLOYMENT SECURITY MAIL
LAB 441

FIRST CLASS MAIL

Cheryl Waldman
Congressional Infor. Service
4520 East-West Highway
Bethesda, Maryland 20814

Reproduction of this publication for commercial use is prohibited by Section 39-121 Arizona Revised Statutes. Permission to reprint this publication, or parts of it, for nonprofit use may be granted upon written request, if credit will be given citing this publication and the Arizona Department of Economic Security.

This periodical is issued and printed by the Arizona Department of Economic Security as authorized by the Wagner-Peyser Act and is paid out of federal funds granted by the U.S. Department of Labor.

If you do NOT desire to continue receiving this publication, please check here ☐ and return this cover to address below.

If your address has changed, please indicate change and return this cover to the address below.

5/30/85 S0465-2.17(u) A

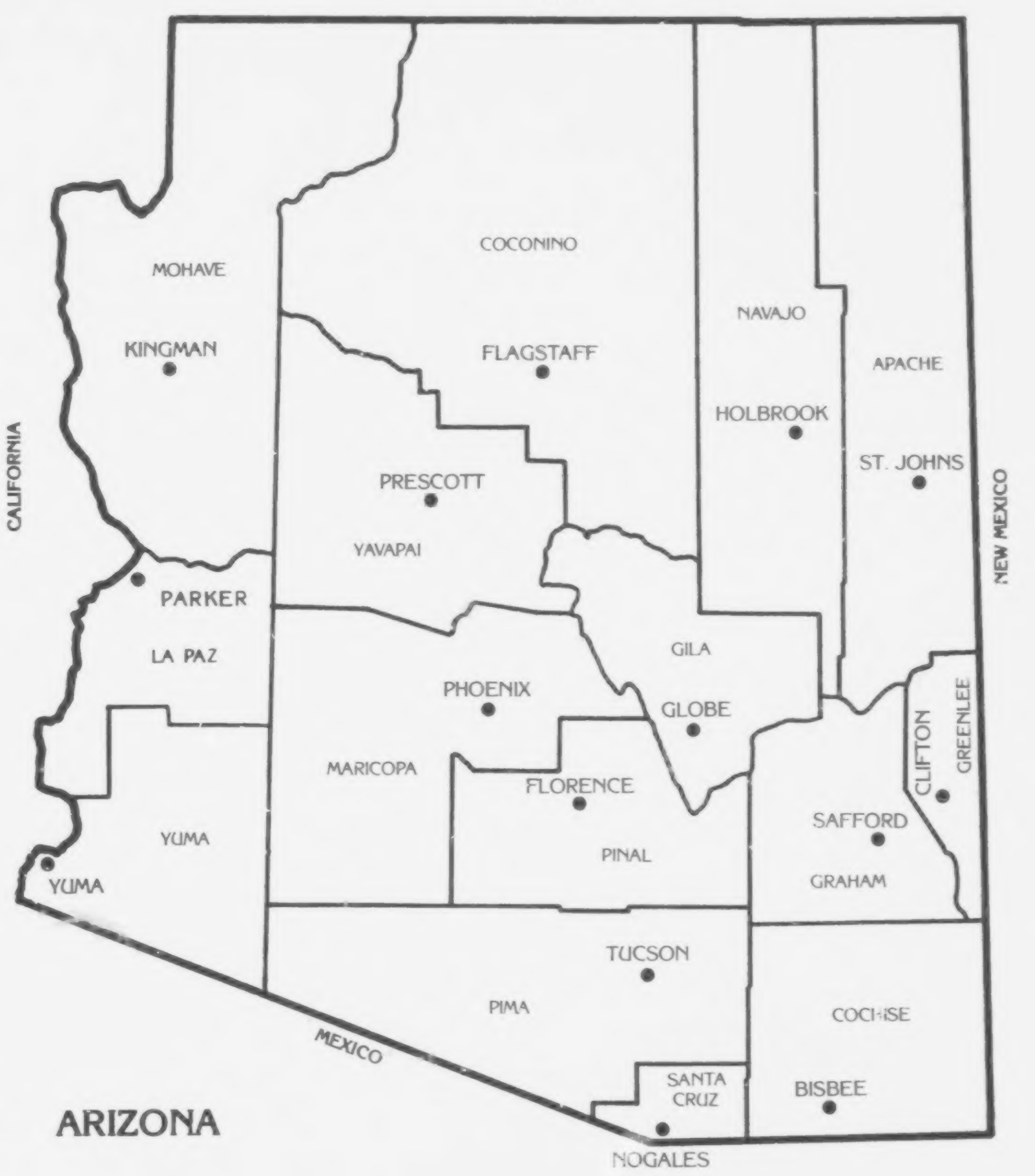
APRIL 1985

PA-340 (5-85)
(Replaces DES-5388)

Arizona Occupational Profile

A Labor Market Information Publication
of the Department of Economic Security

MANUFACTURING


UTAH
CALIFORNIA
NEW MEXICO
MEXICO
MOHAVE
KINGMAN
COCONINO
FLAGSTAFF
NAVAJO
HOLBROOK
APACHE
ST. JOHNS
PRESCOTT
YAVAPAI
PARKER
LA PAZ
GILA
GLOBE
PHOENIX
MARICOPA
FLORENCE
PINAL
CLIFTON
GREENLEE
SAFFORD
GRAHAM
YUMA
YUMA
TUCSON
PIMA
COCHISE
SANTA CRUZ
BISBEE
NOGALES
ARIZONA

OCCUPATIONAL PROFILE

The value of current and accurate occupational employment information has long been recognized by job seekers, public and private administrators, and those involved in training, recruiting, and counseling. A major source of this information in Arizona is the Occupational Employment Statistics (OES) Program -- a cooperative effort between Arizona and the U.S. Department of Labor, Bureau of Labor Statistics.

This Occupational Profile is one in a series of publications produced from information developed by the Occupational Employment Statistics survey. These publications represent one of several occupational employment information delivery systems incorporating OES survey data. The survey is used to collect employment data, by county, for nearly 800 occupations in Arizona. From these surveys, which require the cooperation of the Arizona business community, current employment in the various occupations is determined, and from this an occupational outlook is formulated. The Occupational Profiles contain the survey findings and examine, individually, the industries of Arizona.

Surveyed industries include:

Mining
Construction
Manufacturing
Transportation, Communication, and Public Utilities
Trade
Finance, Insurance, and Real Estate
Services
Government

For further information, or to comment on any aspect of this program, please write to the address on the back cover.

INDUSTRY INFORMATION

INDUSTRY DESCRIPTION

Occupational estimates for the manufacturing industry in Arizona are provided in this publication for the state and counties. Firms included represent those involved in the manufacture of both durable and nondurable goods.

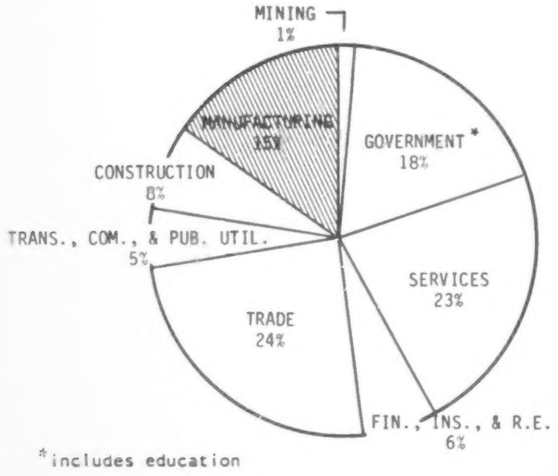
Manufacturers engage in the mechanical or chemical transformation of materials or substances into new products and in assembling component parts of manufactured products. Also included are firms engaged in the smelting and refining of metals.

A detailed description of the types of firms surveyed is found in the Standard Industrial Classification (SIC) Manual[1] under codes 20 through 39.

INDUSTRY CHARACTERISTICS

Of the more than 1.1 million workers in Arizona, about 170,000 or 15 percent were employed in manufacturing in 1984. Ranking behind trade, services, and government, manufacturing is Arizona's fourth-largest industry based on employment. The bulk of employment in manufacturing (79 percent) is involved in the production of durable goods -- primarily machinery. Manufacturers of electronic computing equipment, semiconductors, and related products account for approximately half of the employment in machinery manufacturing.

FIGURE 1: ARIZONA NONAGRICULTURAL EMPLOYMENT, 1984



---

[1] Office of Management and Budget, *Standard Industrial Classification Manual*, 1972 Edition, pp. 57-218.

Comparison of manufacturing employment in Arizona and the United States reflects the prominence of machinery and aerospace-related manufacturing in the state. Nationally, a greater share of employment is involved with the manufacture of nondurables -- particularly textiles.

FIGURE 2: DISTRIBUTION OF MANUFACTURING EMPLOYMENT UNITED STATES - FEB. 1984

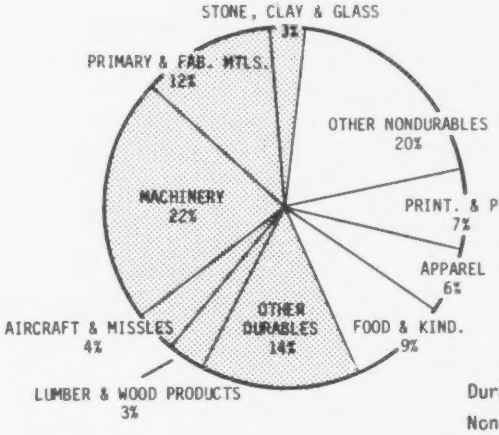
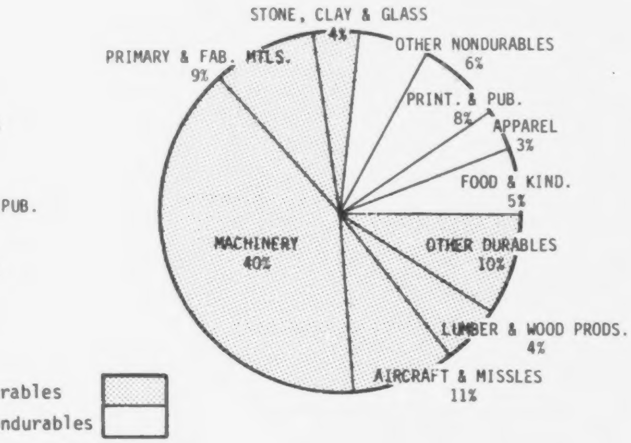


FIGURE 3: DISTRIBUTION OF MANUFACTURING EMPLOYMENT ARIZONA - 1984



Nearly three of every four persons working in manufacturing are employed in Maricopa County -- the remainder divided between Pima County and the "balance of state." Compared to Maricopa and Pima counties, the nonmetropolitan counties are to a greater degree involved in the manufacture of nondurables -- most notably apparel and food products. Prominent in the manufacture of food products are firms producing bottled and/or canned drinks in Navajo, Yuma, and Coconino counties, pet foods in Coconino county, canned fruits and vegetables in Cochise County, and cottonseed oil and cottonseed byproducts in Pinal County. In the apparel industry, manufacturers of men's and boys' clothing dominate, with employment in Pinal, Santa Cruz, and Yuma counties. Of the nonmetro counties, Pinal had the largest manufacturing employment in 1983, most concentrated in the smelting and refining of copper ores and the manufacture of men's apparel. Yavapai County had the greatest number of manufacturing firms, however, led by manufacturers of ready-mix concrete.

FIGURE 4: MANUFACTURING FIRMS AND EMPLOYMENT BY COUNTY - 1983

County	Firms	Employ.
Apache	18	525
Cochise	46	1,575
Coconino	74	2,375
Gila	26	1,375
Graham/Greenlee	11	450
Maricopa	2,257	112,100
Mohave	75	2,175
Navajo	51	1,650
Pima	497	26,600
Pinal	61	2,475
Santa Cruz	38	850
Yavapai	85	1,975
Yuma/LaPaz	55	1,650
STATE	3,294	155,775

The following table provides a profile of each county's manufacturing employment. Conspicuous are several counties whose manufacturing profile is dominated by a single industry. The manufacture of primary and fabricated metals (copper smelting) in Gila County and lumber and lumber products in Apache County are most notable.

FIGURE 5: COUNTY MANUFACTURING EMPLOYMENT PROFILE
- PERCENT DISTRIBUTION, 1984 -

	Total	Aircraft & Missiles	Lumber	Stone, Clay & Glass	Primary & Fab. Mtls.	Machinery	Food & Kind.	Print. & Pub.	Apparel	Other
Apache	100%	*	60	2	*	38	*	*	*	*
Cochise	100%	*	*	15	23	13	12	11	16	10
Coconino	100%	*	32	3	10	4	15	9	2	25
Gila	100%	*	9	4	80	*	1	5	*	1
Graham/Greenlee	100%	*	*	1	72	*	18	9	*	*
Maricopa	100%	9	3	3	9	43	5	8	3	17
Mohave	100%	*	1	4	7	39	1	7	16	25
Navajo	100%	*	35	5	*	2	11	5	*	42
Pima	100%	26	1	4	7	40	4	8	1	9
Pinal	100%	*	5	12	30	3	8	4	18	20
Santa Cruz	100%	*	1	1	1	35	5	3	21	33
Yavapai	100%	1	3	18	24	28	*	7	12	7
Yuma	100%	10	1	7	1	4	15	10	31	21

PERCENT

In 1983, manufacturing establishments numbered more than 3,300, many of which were printing and publishing firms (690); manufacturers of non-electrical machinery, i.e., tools and dies and air conditioning equipment (490); and firms that manufacture fabricated metal products other than machinery, i.e., sheet metal and ornamental metal manufacturers (360). Most manufacturing firms are relatively small (64 percent employ less than 20 persons); yet, 1 percent of Arizona's manufacturing firms employ half of the industry's workers.

FIGURE 6: MANUFACTURING FIRMS BY SIZE CLASS
(SECOND QUARTER 1984)

Employment Size Class	0-9	10-19	20-49	50-99	100-249	250-499	500-999	1,000+
Establishments	1,646	580	560	216	148	57	19	18

INDUSTRY TRENDS

Attesting to the rapid expansion of Arizona's economy, manufacturing employment increased an average of nearly 7 percent annually between 1970 and 1980 and yet was outpaced by all of the other major industry sectors except mining and government. In comparison, annual employment gains for manufacturers nationwide averaged less than 1 percent during the period. Following employment losses in 1982 and marginal increases in 1983, the fortunes of local manufacturing firms rebounded strongly with the economy in 1984.

FIGURE 7: A COMPARISON OF INDUSTRY
GROWTH RATES IN ARIZONA

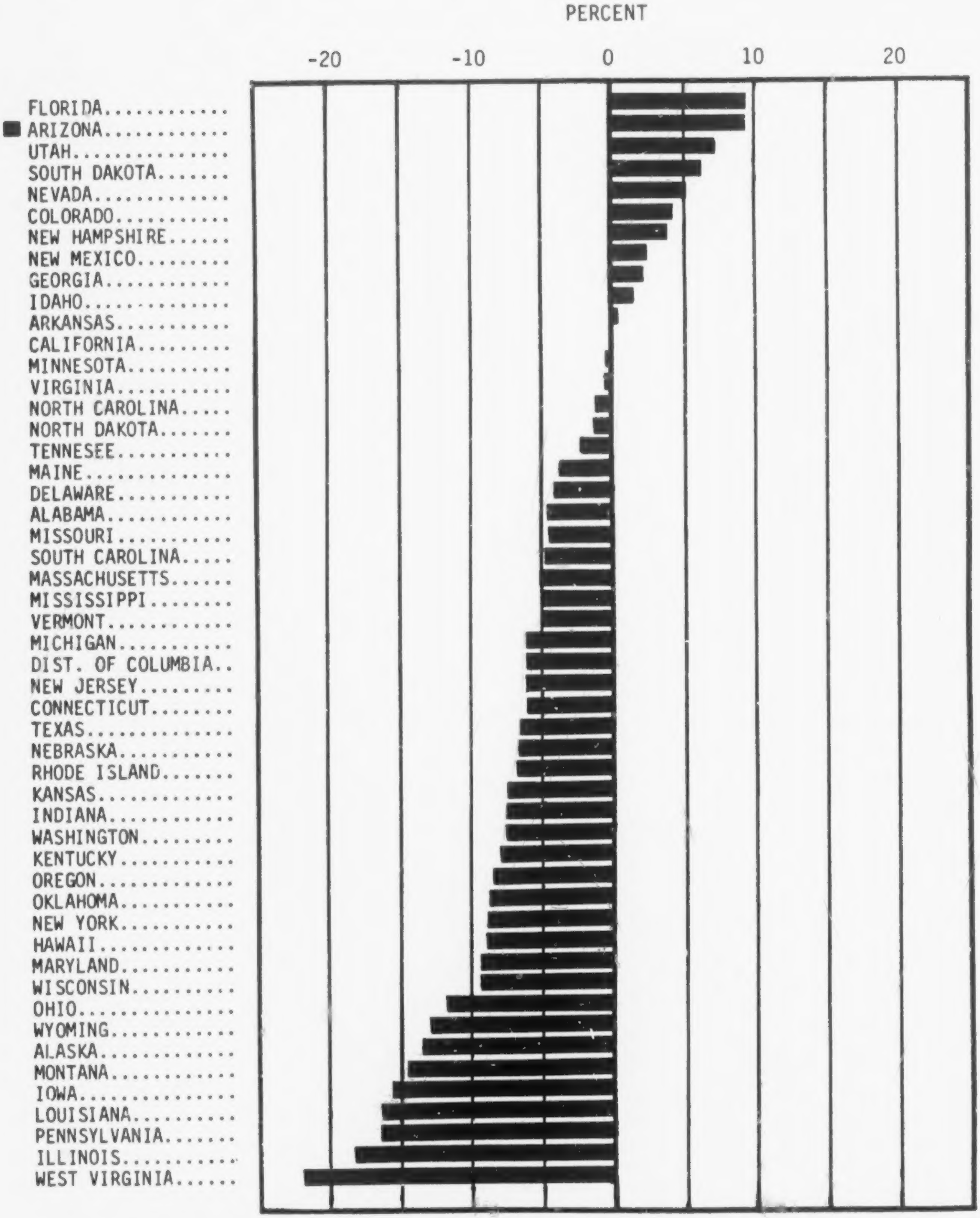
	Employment (000s)			Percent Growth	
	1970	1980	1984	1970-1980	1980-1984
Manufacturing	91.2	154.4	172.3	69.3 %	11.6 %
Mining	20.6	21.0	13.3	1.9	-36.7
Construction	37.1	76.6	96.2	106.5	25.6
TCPU	30.0	51.3	60.4	71.0	17.7
Trade	127.0	243.0	286.7	91.3	18.0
FIRE	30.5	58.2	71.7	90.8	23.2
Services	91.5	207.7	274.1	127.0	32.0
Government	119.5	201.8	206.1	68.9	2.1
TOTAL	547.4	1,014.0	1,180.8	85.2 %	16.4 %

Since 1980, virtually all manufacturing employment growth was claimed by Maricopa and Pima counties and was concentrated in the manufacture of durable goods. Although not creating as many job openings as its upstate metropolitan counterpart, Pima County manufacturers increased their employment 35 percent between 1980 and 1984. Maricopa County registered a 10 percent increase for the period while in the rural counties Apache, Yavapai, Coconino, and Yuma registered the largest gains.

In recent years, the manufacture of aircraft and missiles has provided the primary impetus for expansion in the state's durable sector, increasing employment more than 50 percent between 1980 and 1984. Further contributing to this sector's robust expansion are manufacturers of electrical components whose employment increased 25 percent for the period. Predominant in this industry are firms engaged in the manufacture of semiconductors and related solid state devices.

In the manufacture of nondurable products, firms involved in printing and publishing are perpetuating a trend of consistent employment increases. Also showing recent strength are firms producing miscellaneous plastics products, and, although having limited employment, those producing textile goods.

FIGURE 8: PERCENT CHANGE IN AVERAGE ANNUAL MANUFACTURING EMPLOYMENT BY STATE 1980 to 1984 (PRELIMINARY)



Source: Bureau of Labor Statistics, U.S. Department of Labor.

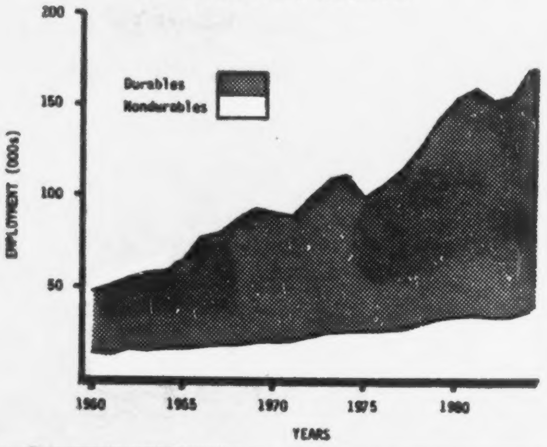
FIGURE 9: EMPLOYMENT CHANGE IN ARIZONA'S MANUFACTURING INDUSTRIES (1980 - 1984)

INDUSTRIES	EMPLOYMENT 1980	EMPLOYMENT 1984	NUMERICAL CHANGE	PERCENT CHANGE
FOOD & KIND. PRODS.	9,414	7,949	-1,465	-15.6%
APPAREL	5,565	5,047	-517	-9.3
LUMBER & WOOD PRODS.	5,956	7,147	1,191	20.0
PRINTING A PUBLISH.	11,075	13,438	2,363	21.3
CHEMICALS & ALLIED	3,445	3,739	294	8.5
STONE, CLAY & GLASS	6,299	7,334	1,035	16.4
PRIMARY METALS	9,508	7,009	-2,499	-26.3
FABRICATED METALS	7,951	9,337	1,386	17.4
MACHINERY, EXC. ELECT.	24,660	25,705	1,045	4.2
ELECTRICAL MACHINERY	33,572	42,384	8,812	26.2
ALL OTHER MFG.	37,015	43,218	6,203	16.8
TOTAL	154,459	172,307	17,848	11.6%

Losing employment during the period were the primary metals industry (smelting), the manufacture and processing of food products, apparel, leather, and petroleum products.

Although fluctuating with the business cycle, manufacturing's historically strong growth pattern is expected to continue. The industry will, however, lose some of its share of employment to the state's service-producing sectors -- reflecting an evolution that is evident both locally and, to a greater degree, nationally. Not to be interpreted as a sign of weakness, this evolution supports the contention that each newly created job in manufacturing results in the creation of at least one other in a service-producing industry.

FIGURE 10: ARIZONA MANUFACTURING EMPLOYMENT, 1960-1984



Fortified by the demand for so-called high-tech products, the projected growth rate for manufacturing employment will approximate the average for all Arizona industries. Only the trade and services sectors are expected to register more than the 20 percent increase expected in manufacturing between 1983 and 1987. Most of the industry's employment growth will be in the Phoenix and Tucson metropolitan areas -- each expected to register approximately 20 percent expansion between 1983 and 1987. A portion of this expansion, however, represents the rebounding of employment to pre-recession levels.

As demonstrated in the past, the various manufacturing industries will realize significant variation in employment growth. Manufacturers of durable goods will continue to show the largest increases. Most prominent will be firms manufacturing electrical and electronic machinery and, with heightened federal defense expenditures, those manufacturing ordnance and aerospace products. Richard Kloster, employment manager of Garrett Turbine Engine Company, for example, foresees federal spending for military equipment manifesting itself in an increasing number and percentage of Garrett employment involved in the production of engines for military rather than commerical and general aviation. Other Arizona manufacturers will similarly benefit in the coming years. On the other hand, employment in Arizona's food manufacturing and processing industry will, like the nation's, little more than maintain current employment levels.

Future employment growth will, as in other sunbelt states, be augmented by the economic boost created by immigration and the relocation and establishment of new businesses in the state. The concentration of manufacturing employment will continue to shift away from the eastern and midwestern industrial complex to establish greater geographical homogeneity.

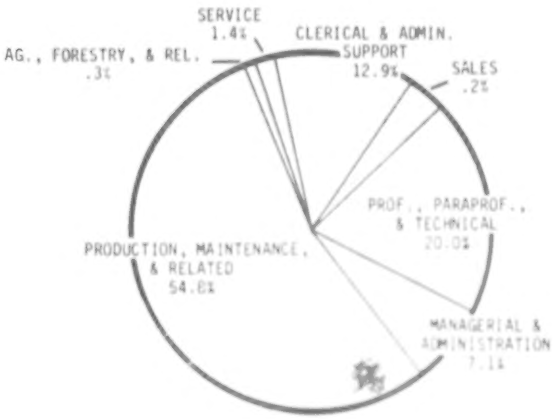
OCCUPATIONAL INFORMATION

OCCUPATIONAL ANALYSIS

Not surprisingly, production and maintenance workers dominate in manufacturing -- accounting for more than half of the industry's employment. In this category is a wide range of occupations which includes assemblers, mechanics and repairers, truck drivers, and craft workers such as carpenters and electricians. Numbering more than 8,000 in 1983, precision electrical and electronic equipment assemblers represent Arizona's largest manufacturing occupation and contribute significantly to the size of the maintenance and production category.

With employment of nearly 7,000, electrical and electronic engineers rank as the second largest occupation in Arizona's manufacturing industry and are followed by first-line production managers and supervisors with 4,600.

FIGURE 11: OCCUPATIONS IN ARIZONA'S
MANUFACTURING INDUSTRY
MAY 1983



Review of manufacturing occupations with the greatest employment reflects the significance of electronics-related firms in the state. Three of the top five occupations are directly related to the production of electrical goods. Also ranking high are occupations common to all or most manufacturers, e.g., managers and executives, clerical workers, and assemblers and fabricators.

Comparison of the staffing patterns for metropolitan and nonmetropolitan counties indicates a larger percentage of professional and technical personnel and a smaller share of maintenance and production workers in Maricopa and Pima counties. In Pima County, for example, one worker in four is a professional, paraprofessional, or technical worker, whereas in the nonmetropolitan counties the ratio is about one in seventeen.

Outside of Maricopa and Pima counties, three-fourths of all manufacturing employees are production and maintenance workers. A greater emphasis on research and development and the location of administrative services in Phoenix and Tucson contribute to this geographic distribution. Research and development is especially vital to the aerospace and electronics industries which are active in these cities. Of the state's nearly 7,000 electrical and electronic engineers employed in 1983, 5,200 worked in Maricopa County, 1,600 in Pima County, and 40 in the "balance of state." Employment of electrical and electronic engineering technicians and technologists is to an even greater degree concentrated in the two urban counties, with nearly ninety percent employed in Maricopa County alone.

FIGURE 12: COMPARISON OF COUNTY STAFFING PATTERNS - JUNE 1983

	Maricopa County	Pima County	Nonmetro Counties
Managerial & Admin.	7.1	8.7	4.6
Professional & Tech.	20.9	24.9	6.2
Sales	3.8	3.0	2.0
Clerical	12.5	16.3	9.7
Service	1.4	1.2	1.4
Agri. & Forestry	.1	.0	2.0
Production & Mainten.	54.2	45.9	74.1
	100.0 %	100.0 %	100.0 %

In Arizona, manufacturing will realize expansion in each of the major occupational categories as the industry adds 30,000 new jobs between 1983 and 1987. Changes in occupational employment will vary, however, as the industry responds to a host of technical, political, and economic developments. Continued mechanization, for example, and other laborsaving procedures will, over the long-run, continue to erode the industry's employment share claimed by laborers, helpers, and material movers. On the other hand, increasingly complex manufacturing processes will strengthen the demand for a variety of professional and technical occupations.

Production and maintenance occupations will continue to provide the greatest number of opportunities to job seekers. Led by the demand for assemblers, this occupational category is expected to provide more than 25,000 openings between 1983 and 1987 as a result of industry expansion and the need to replace workers who leave the labor force. Because assembly jobs often require limited education or training, there is significant occupational mobility and, as a result, an even greater number of workers will be needed to satisfy turnover requirements. Although its impact is a topic of controversy, the mechanization of assembly-line operations will likely dampen the demand for certain assemblers. Much assembly work is, however, beyond the capabilities of today's robots which have yet to receive widespread application in the assembly of small or irregularly shaped parts.

Already suppressing employment of assemblers, according to staffing specialist Robert W. Dyck of Honeywell Information Systems, Inc., is increased product sophistication. "In the manufacture of computers," he says, "the production of more powerful, but smaller, units requires the assembly of fewer parts." Such trends notwithstanding, assembly occupations will continue to provide the greatest number of job openings in Arizona's manufacturing industry.

FIGURE 13: OCCUPATIONS WITH THE GREATEST EMPLOYMENT IN ARIZONA'S MANUFACTURING INDUSTRY

	Employment 1983	Job Openings* 1983-1987
Electrical/Electronic Equipment Assemblers - Precision	8,275	4,001
Electrical & Electronic Engineers	6,860	2,056
First Line Managers/Supervisors - Production & Operatives	4,592	1,209
Electrical/Electronic Engineering Technicians	4,094	1,357
Assemblers/Fabricators	3,939	1,440
General Managers & Top Executives	3,498	1,102
Secretaries	3,146	1,405
Machinists	2,779	754
General Office Clerks	2,742	1,180
Sewing Machine Operators, Garment	2,740	850
Production Inspectors, Testers, Graders	2,391	777
Electronic Semiconductor Processors	2,387	995
Precision Inspectors, Testers, & Graders	2,299	848
Other Sales Representatives, Exc. Retail	2,294	782
Electrical & Electronic Assemblers	2,196	794
Truck Drivers, Heavy or Tractor Trailer	1,917	361
Mechanical Engineers	1,701	474
Production, Planning, & Expediting Clerks	1,667	769
Bookkeeping, Accounting, & Auditing Clerks	1,638	637
Industrial Production Managers	1,568	494
Stock Clerks - Storeroom, Warehouse, or Yard	1,553	536
Electro-Mech. Equip. Assemblers - Precision	1,523	653
Traffic, Shipping, & Receiving Clerks	1,466	469
Packaging & Filling Machine Opers. & Tenders	1,408	323
Industrial Engineers, Exc. Safety	1,404	475
Maintenance Repairers, General Utility	1,240	311
Systems Analysts, Electronic Data Processing	1,167	265
Freight, Stock, & Material Movers, Hand	1,150	300
Drafters	1,131	389
Computer Programmers	1,089	230
Truck Drivers, Light - Incl. Delivery & Route	1,086	218
Machine Tool Cutting Operators & Tenders - Metal	1,081	298
Janitors & Cleaners, Exc. Maids & Housekeeping	1,076	418
Industrial Truck & Tractor & Operators	1,062	202
Hand Packers & Packagers	960	241

*Does not include turnover.

Particularly vulnerable to pressures of mechanization is employment of laborers, freight and stock movers, and other unskilled workers. Automation coupled with the relatively large labor force in these occupations will make job-hunting increasingly competitive.

Professional and technical personnel are expected to continue increasing their share of industry employment with research and development insuring a demand for engineers, scientists, and technicians. Electrical and electronic engineers, which represent the largest professional occupation in manufacturing, account for nearly five percent of all manufacturing employment and nine percent of electronics-related manufacturing employment. With their knowledge of mathematics, science, and electronics, engineers are involved with production and quality control as well as research and development. Most are specialized and work in a specific area, such as in the design and implementation of solid-state circuitry in radar, computers, and calculators. Although increased demand by businesses and government for computers, communications equipment, and military electronics is expected to account for much of the projected employment demand for engineers, consumer demand for electrical and electronic goods, and increased research and development for more efficient manufacturing processes will likely create additional jobs. Other opportunities will be available for engineers in sales departments as industry products increasingly require sales personnel with technical backgrounds.

Also critical in the design and manufacture of electrical and electronic equipment are technicians, whose employment will expand an estimated 25 percent between 1983 and 1987. Opportunities will be best for graduates of postsecondary school technical training programs, particularly programs in which students gain practical work experience. The need to maintain and repair an ever-increasing number of electronic products used by industry and consumers will contribute to a strong and stable demand for workers with technical skills.

As in other industries in Arizona, a strong and unwavering demand for quality clerical personnel exists in manufacturing. During the projection period, more than 4,000 openings will result from industry growth and the need to replace those who leave the labor force. Because turnover rates are relatively high for clerical workers, many more opportunities will result from the need to replace workers who change jobs. Especially attractive to employers are clerical workers who are proficient with word processing and other office equipment. Expected to experience the strongest demand are secretaries, general office clerks, production, and bookkeeping clerks.

FIGURE 14: MANUFACTURING OCCUPATIONS WITH THE GREATEST EMPLOYMENT AND JOB OPENINGS

LARGEST OCCUPATIONS BY COUNTY	ESTIMATED 1983 EMPLOYMENT	PCT. OF COUNTY TOTAL	HIGHEST DEMAND OCCUPATIONS 1983-1987	ESTIMATED OPENINGS 1983-1987
APACHE				
Precision Assemblers, Metal	111	25.8%	Precision Assemblers, Metal	47
Precision Inspectors, Testers, & Graders	39	9.1	Precision Inspectors, Testers & Graders	14
Logging Tractor Operators	27	6.3	Logging Tractor Operators	5
First Line Mgrs./Supers.-Maint./Prod./Construction	19	4.4	Plastic Molding & Casting Machine Operators & Tenders	5
Woodworking Machine Operators & Tenders, Exc. Sawing	16	3.7	Woodworking Machine Operators & Tenders, Exc. Sawing	4
COCHISE				
Sewing Machine Opers., Garment	153	10.7%	Sewing Machine Opers., Garment	36
First Line Mgrs./Supers. - Production & Operatives	68	4.7	General Office Clerks	13
Truck Drivers, Heavy or Tractor Trailer	52	3.6	Truck Drivers, Heavy or Tractor Trailer	13
General Managers & Top Execs.	36	2.5	General Managers & Top Execs.	12
Maintenance Repairers, General Utility	35	2.4	First Line Mgrs./Supers. - Production & Operatives	10
COCONINO				
General Managers & Top Execs.	83	3.7%	General Managers & Top Execs.	24
First Line Mgrs./Supers. - Production & Operatives	72	3.2	Medical Appliance Makers	24
Medical Appliance Makers	69	3.1	Package & Filling Machine Opers. & Tenders	21
Machinists	68	3.1	Machinists	19
Packaging & Filling Machine Operators & Tenders	61	2.8	Secretaries	19
GILA				
First Line Mgrs./Supers. - Production & Operatives	107	8.3%	First Line Mgrs./Supers. - Production & Operatives	7
Furnace Operators & Tenders	60	4.6	General Mgrs. & Top Execs.	7
Heat Treating/Tempering Mach. Opers. - Metal & Plastic	55	4.3	Heat Treating/Tempering Mach. Opers. - Metal & Plastic	7
Electricians	47	3.6	Furnace Opers. & Tenders	7
Truck Drivers, Heavy or Tractor Trailer	42	3.2	Truck Drivers, Heavy or Tractor Trailer	7
GRAHAM & GREENLEE				
Furnace Operators & Tenders	99	22.2%	Furnace Operators & Tenders	11
First Line Mgrs./Supers.- Const. Trades & Extraction Workers	35	7.8	Driver/Sales Workers	5
Industrial Truck & Tractor Operators	30	6.7	General Office Clerks	5
Maintenance Repairers, General Utility	27	6.1	Industrial Truck & Tractor Operators	4
Mechanic & Repairer Helpers	24	5.4		

FIGURE 14: MANUFACTURING OCCUPATIONS WITH THE GREATEST EMPLOYMENT AND JOB OPENINGS (CONTD.)

LARGEST OCCUPATIONS BY COUNTY	ESTIMATED 1983 EMPLOYMENT	PCT. OF COUNTY TOTAL	HIGHEST DEMAND OCCUPATIONS 1983-1987	ESTIMATED OPENINGS 1983-1987
MARICOPA				
Electrical/Electronic Equip. Assemblers - Precision	7,352	6.8%	Electrical/Electronic Equip. Assemblers - Precision	3,530
Electrical/Electronic Engineers	5,215	4.8	Electrical/Electronic Engineers	1,550
Electrical/Electronic Engineering Techs.	3,569	3.3	Secretaries	1,040
First Line Mgrs./Supers. - Production & Opers.	3,246	3.0	Electrical/Electronic Engineering Techs.	1,179
Assemblers/Fabricators - Exc. Machine, Elect., & Precision	2,643	2.5	Electronic Semiconductor Processors	986
MOHAVE				
Assemblers/Fabricators - Exc. Machine, Elect., & Precision	181	8.8%	Assembler/Fabricators - Exc. Machine, Elect., & Precision	68
Sewing Machine Operators, Non-Garment	140	6.8	Misc. Engineering & Related Technicians	43
Misc. Engineering & Related Technicians	134	6.5	Combination Machine Tool Operators - Metal & Plastic	35
Combination Machine Tool Operators-Metal & Plastic	87	4.2	Sewing Machine Operators, Non-Garment	33
Packaging & Filling Machine Operators & Tenders	76	3.7	Packaging & Filling Machine Operators & Tenders	24
NAVAJO				
Crushing, Grinding, & Mixing Machine Operators	71	5.8%	Crushing, Grinding, & Mixing Machine Operators	19
Fallers & Buckers	68	5.5	Fallers & Buckers	15
Truck Drivers, Heavy or Tractor Trailer	50	4.1	Salesworkers	13
Machine Feeders & Offbearers	48	3.9	Truck Drivers, Heavy or Tractor Trailer	11
Sawing Machine Operators & Tenders	45	3.7	Sawing Machine Operators & Tenders	10
PIMA				
Electrical & Electronic Engineers	1,605	6.1%	Electrical & Electronic Engineers	502
Electromech. Equip. Assemblers - Precision	1,128	4.3	Electromech. Equip. Assemblers - Precision	472
Electrical & Electronic Assemblers	990	3.7	Electrical & Electronic Assemblers	387
General Office Clerks	811	3.1	Electrical/Electronic Equip. Assemblers - Precision	340
Mechanical Engineers	805	3.0	General Office Clerks	332

FIGURE 14: MANUFACTURING OCCUPATIONS WITH THE GREATEST EMPLOYMENT AND JOB OPENINGS (CONTD.)

LARGEST OCCUPATIONS BY COUNTY	ESTIMATED 1983 EMPLOYMENT	PCT. OF COUNTY TOTAL	HIGHEST DEMAND OCCUPATIONS 1983-1987	ESTIMATED OPENINGS 1983-1987
PINAL				
Sewing Machine Opers., Garment	284	12.6%	Sewing Machine Opers., Garment	67
First Line Mgrs./Supers. - Production & Operatives	113	5.0	First Line Mgrs./Supers.- Production & Operatives	21
Truck Drivers, Heavy or Tractor Trailer	71	3.1	General Mgrs. & Top Execs.	18
Freight, Stock, & Matl. Movers, Hand	63	2.8	Truck Drivers, Heavy or Tractor Trailer	17
General Managers & Top Execs.	57	2.5	Freight, Stock, & Matl. Movers, Hand	15
SANTA CRUZ				
Assemblers/Fabricators - Exc. Machine, Elect., & Precision	105	15.0%	Assemblers/Fabricators - Exc. Machine, Elect., & Precision	34
Sewing Machine Opers., Garment	90	12.8	Sewing Machine Opers., Garment	21
First Line Mgrs./Supers. - Production & Operatives	44	6.3	General Managers & Top Execs.	10
General Managers & Top Execs.	28	4.0	First Line Mgrs./Supers. - Production & Operatives	10
Traffic, Shipping, & Receiving Clerks	25	3.6	Secretaries	8
YAVAPAI				
Assemblers/Fabricators - Exc. Machine, Elect., & Precision	242	11.0%	Assemblers/Fabricators - Exc. Machine, Elect., & Precision	115
Machine Forming Operators & Tenders - Metal & Plastic	155	7.1	Machine Forming Operators & Tenders - Metal & Plastic	74
Truck Drivers, Heavy or Tractor Trailer	72	3.3	Truck Drivers, Heavy or Tractor Trailer	22
Plastic Molding & Casting Mach. Opers. & Tenders	63	2.9	First Line Supers. & Mgr./ Supers. - Service	19
Maintenance Repairers, General Utility	62	2.8	Plastic Molding & Casting Mach. Opers. & Tenders	18
YUMA/LA PAZ				
Sewing Machine Operators, Garment	380	23.3%	Sewing Machine Operators, Garment	90
Textile Mach. Opers. - Winding, Weaving, Cutting	213	13.1	Textile Mach. Opers. - Winding, Weaving, Cutting	61
General Managers & Top Execs.	60	3.7	General Managers & Top Execs.	20
Truck Drivers, Heavy or Tractor Trailer	49	3.0	Truck Drivers, Heavy or Tractor Trailer	12
Machinery Maintenance Mechanics, Textiles	33	2.0	Mail Machine Opers., Preparation & Handling	10

OCCUPATIONAL STRUCTURE

The following fourteen tables provide employment estimates and projected employment and job openings for the counties and the state. Graham and Greenlee counties have been combined due to their close proximity, similar economies, and size. A separate table for La Paz County is not included as development of the survey sample preceded this county's creation.

When using the data, please note the following:

1) The data reflect full and part-time wage and salary employment only, and do not include self-employed or unpaid family workers.

2) Total job openings represent the number of openings due to growth of the industry and separations from the labor force. They do not account for labor turnover, i.e., openings created when a worker changes jobs, leaving the job to be filled by someone else. These vacancies are generally the largest source of job openings.

3) To eliminate the possible disclosure of confidential employer information, occupations have been added to the appropriate "All Other" or residual category if: less than three firms reported a single occupation; one firm reported more than 50 percent of the occupational estimate; two firms combined reported more than 75 percent of the occupational estimate. In certain cases, releases have been obtained from large employers to waive the confidentiality criteria.

4) The projection technique does not possess the degree of accuracy that may be implied by small employment and demand figures.

5) Data for occupations with employment of less than five are included in the appropriate "All Other" categories. These occupations are not listed, however, in the summary of "All Other" categories which follows each table.

ESTIMATED EMPLOYMENT AND JOB OPENINGS

MANUFACTURING

STATEWIDE

	ESTIMATED MAY 1983 EMPLOYMENT	PERCENT OF MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	TOTAL JOB OPENINGS 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	10,686	7.1	12,939	3,673
Financial Managers	601	.4	730	203
Personnel, Training, & Labor Relations Mgrs.	364	.2	440	120
Purchasing Managers	292	.2	362	102
Marketing, Advertising, & Public Rel. Mgrs.	854	.6	1,057	330
Administrative Services Managers	533	.4	672	206
Industrial Production Managers	1,568	1.0	1,869	494
General Managers & Top Executives	3,498	2.3	4,154	1,102
All Other Managers & Administrators	2,976	2.0	3,655	1,116
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	29,991	20.0	36,988	9,448
Management Support Occupations	4,116	2.7	5,049	1,521
Accountants & Auditors	917	.6	1,102	325
Budget Analysts	189	.1	234	73
All Other Financial Specialists	121	.1	142	34
Purchasing Agents & Buyers, Farm Products	17	.0	17	2
Purchasing Agents, Exc. Wholesale, Retail, & Farm	836	.6	1,033	307
Personnel, Training, & Labor Rel. Specialists	780	.5	962	276
Cost Estimators	220	.1	267	96
All Other Management Support Workers	1,036	.7	1,292	408
Engineering & Related Occupations	19,101	12.7	23,842	6,016
Aeronautical and Astronautical Engineers	853	.6	1,073	272
Metallurgical & Materials Engineers	66	.0	72	9
Chemical Engineers	106	.1	132	34
Civil Engineers, Incl. Traffic	65	.0	82	26
Electrical & Electronic Engineers	6,860	4.6	8,497	2,056
Industrial Engineers, Exc. Safety	1,404	.9	1,768	475
Safety Engineers, Exc. Mining	63	.0	78	20
Mechanical Engineers	1,701	1.1	2,068	474
All Other Engineers	935	.6	1,140	272
Civil Engineering Technicians & Technologists	30	.0	39	13
Electrical/Electronic Engineering Technicians	4,094	2.7	5,209	1,357
Industrial Engineering Techs.	176	.1	224	68
Mechanical Engineering Techs.	612	.4	770	179
Drafters	1,131	.8	1,425	389
All Other Engineering & Related Technicians	1,005	.7	1,265	372
Natural Scientists & Related Occupations	528	.4	598	127
Physicists & Astronomers	13	.0	17	5
Chemists, Exc. Biochemists	147	.1	171	41
All Other Physical Scientists	26	.0	31	7
Agricultural & Food Scientists	31	.0	33	7
Biological Scientists	35	.0	37	6
All Other Life Scientists	15	.0	17	3
Biological, Agri., & Food Techs., Exc. Health	65	.0	69	11
Chemical Techs., Exc. Health	186	.1	212	45
All Other Physical & Life Science Techs.	10	.0	11	2
Computer, Math, Research, & Related Occupations	3,499	2.3	4,150	827
Systems Analysts, Electronic Data Processing	1,167	.8	1,380	265
Computer Programmers	1,089	.7	1,264	230
Computer Programmer Aides	288	.2	344	81
Programmers - Numerical, Tool, & Process	228	.2	266	53
Operations & Systems Analysts, Exc. Computer	614	.4	757	162
Statisticians	70	.0	83	22
Mathematical Technicians	43	.0	56	14
Law Related Occupations	14	.0	16	4
Lawyers	14	.0	16	4

ESTIMATED EMPLOYMENT AND JOB OPENINGS

MANUFACTURING

STATEWIDE (CONTD.)

	ESTIMATED MAY 1983 EMPLOYMENT	PERCENT OF MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	TOTAL JOB OPENINGS 1983-1987
Teachers, Librarians, & Related Occupations	26	.0	32	12
Teachers & Instructors, Voc. Ed. & Training	8	.0	10	4
Librarians, Professional	18	.0	22	8
Health Practitioners, Techs., & Related Occupations	123	.1	153	53
Writers, Artists, Athletes, & Related	1,740	1.2	2,120	630
Writers & Editors	584	.4	707	229
Technical Writers	254	.2	317	74
Public Rel. Specialists & Publicity Writers	41	.0	49	14
Reporters & Correspondents	445	.3	536	171
Photographers	63	.0	76	20
Artists & Related Workers	99	.1	119	38
Designers, Exc. Interior Designers	254	.2	316	84
All Other Professional, Paraprofessional, & Technical Workers	844	.6	1,028	258
SALES & RELATED OCCUPATIONS	5,154	3.4	6,093	1,693
First Line Supervisors & Managers - Sales	462	.3	539	143
Sales Agents, Advertising	357	.2	427	118
Sales Engineers	494	.3	625	155
Sales Representatives, Scientific & Related Products & Services, Exc. Retail	831	.6	1,000	280
Other Sales Representatives, Exc. Retail	2,294	1.5	2,696	782
Salespersons, Retail	63	.0	62	8
Cashiers	119	.1	115	24
News/Street Vendors, Phone Solicitors, Door-to-Door Sales Workers	125	.1	150	51
All Other Sales & Related Workers	409	.3	479	132
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	19,343	12.9	23,302	7,649
First Line Supervisors & Manager/Supervisors	608	.4	735	215
First Line Supers.-Clerical & Admin. Support	608	.4	735	215
Industry-Specific Clerical & Admin. Support	313	.2	376	117
Advertising Clerks	163	.1	196	69
Proofreaders & Copy Markers	150	.1	180	48
General Office Occupatiions	10,377	6.9	12,484	4,492
Secretaries	3,146	2.1	3,780	1,405
Stenographers	76	.1	93	35
Receptionists & Information Clerks	200	.1	240	86
Typists	273	.2	328	130
Typists, Word Processing Equipment	213	.1	270	83
Personnel Clerks, Exc. Payroll & Timekeeping	212	.1	257	107
File Clerks	185	.1	225	95
Order Clerks - Materials, Merch., & Service	625	.4	764	280
Procurement Clerks	170	.1	211	62
Statistical Clerks	147	.1	187	74
Interviewing Clerks, Exc. Personnel & Welfare	15	.0	18	5
Bookkeeping, Accounting, & Auditing Clerks	1,638	1.1	1,933	637
Payroll & Timekeeping Clerks	209	.1	246	77
Billing, Cost, & Rate Clerks	526	.4	641	236
General Office Clerks	2,742	1.8	3,291	1,180
Office Machine Operators	1,554	1.0	1,884	578
Billing, Posting, & Calculating Machine Opers.	67	.0	81	27
Duplicating Machine Operators	36	.0	43	16
Mail Machine Operators, Preparation & Handling	62	.0	75	32
Computer Operators, Exc. Peripheral Equipment	493	.3	590	155
Peripheral EDP Equipment Operators	70	.0	86	34

ESTIMATED EMPLOYMENT AND JOB OPENINGS

MANUFACTURING

STATEWIDE (CONTD.)

	ESTIMATED MAY 1983 EMPLOYMENT	PERCENT OF MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	TOTAL JOB OPENINGS 1983-1987
Data Entry Keyers, Exc. Composing	543	.4	659	164
Data Keyers, Composing	114	.1	137	54
All Other Office Machine Operators	169	.1	213	96
Communications & Message Distribution	207	.1	249	96
Switchboard Operators	160	.1	192	78
Mail Clerks, Exc. Mail Machine Operators & Postal Service	33	.0	40	13
Messengers	14	.0	17	5
Material Distribution & Recording Occupations	5,230	3.5	6,347	1,941
Dispatchers - Exc. Police, Fire, & Ambulance	180	.1	214	51
Production, Planning, & Expediting Clerks	1,667	1.1	2,048	769
Measurers	174	.1	207	55
Stock Clerks - Stockroom, Warehouse, or Yard	1,553	1.0	1,897	536
Traffic, Shipping, & Receiving Clerks	1,466	1.0	1,755	469
All Other Material Recording/Scheduling/Dist.	190	.1	226	61
All Other Clerical & Administrative Support	1,054	.7	1,227	251
SERVICE OCCUPATIONS	2,072	1.4	2,513	747
First Line Supervisors & Managers - Service	201	.1	250	90
Protective Service Occupations	619	.4	763	178
Guards & Watch Guards	619	.4	763	178
Food & Beverage Preparation	74	.0	91	31
Cleaning & Building Services Occupations	1,109	.7	1,330	424
Janitors & Cleaners, Exc. Maids & Housekeeping	1,076	.7	1,297	418
All Other Cleaning/Building Service, Exc. Private House	33	.0	33	6
All Other Service Occupations	69	.0	79	24
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	471	.3	501	88
First Line Supervisors - Agri., Forestry, & Rel.	43	.0	45	7
Fallers & Buckers	124	.1	132	24
Choke Setters	43	.0	47	9
Log Handling Equipment Operators	45	.0	49	10
Logging Tractor Operators	84	.1	90	13
All Other Timber Cutting & Related Workers	52	.0	54	8
Log Graders & Scalers	31	.0	33	5
Graders & Sorters, Agricultural Products	24	.0	22	4
Gardeners & Groundskeepers, Exc. Farm	21	.0	25	8
All Other Agri., Forestry, Fishing, & Related	4	.0	4	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	82,204	54.8	97,552	25,575
First Line Supervisors & Managers-Prod. & Rel.	5,728	3.8	6,751	1,569
First Line Managers/Supervisors - Mechanics/Installers/Repairers	426	.3	498	136
First Line Managers/Supervisors - Construction Trades & Extraction Workers	115	.1	130	27
First Line Mgrs./Supers. - Production & Opers.	4,592	3.1	5,452	1,209
First Line Mgrs./Supers. - Transport. Operatives	286	.2	321	93
First Line Mgrs./Supers. - Laborers & Helpers	308	.2	349	104
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	1	.0	1	0
Inspectors & Related Occupations	4,690	3.1	5,733	1,625
Precision Inspectors, Testers, & Graders	2,299	1.5	2,860	848
Production Inspectors, Testers, & Graders	2,391	1.6	2,873	777

ESTIMATED EMPLOYMENT AND JOB OPENINGS

MANUFACTURING

STATEWIDE (CONTD.)

	ESTIMATED MAY 1983 EMPLOYMENT	PERCENT OF MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	TOTAL JOB OPENINGS 1983-1987
Mechanics, Installers, & Repairers	5,696	3.8	6,741	1,561
Machinery Maintenance Mechanics	832	.6	982	232
Machinery Maintenance Mechanics, Textiles	45	.0	53	12
Machinery Maintenance Mechs., Sewing Machines	44	.0	51	11
Machinery Maintenance Mechanics, Water & Power Generation Plants	36	.0	41	8
All Other Machinery Maintenance Mechanics	10	.0	11	2
Millwrights	42	.0	46	9
Refractory Matls. Repairers, Exc. Brick Masons	36	.0	36	3
Machinery Maintenance Workers	169	.1	198	50
Maintenance Repairers, General Utility	1,240	.8	1,430	311
Automotive Mechanics	204	.1	226	40
Bus & Truck Mechs., & Diesel Eng. Specialists	233	.1	252	40
Mobile Heavy Equip. Mechanics, Exc. Engines	59	.0	67	11
Aircraft Mechanics	117	.1	149	40
Aircraft Engine Specialists	112	.1	143	36
Data Processing Equipment Repairers	442	.3	478	62
Electronics Repairers, Commercial & Ind. Equip.	436	.3	565	157
All Other Electrical Mechs./Installers/Repairers	16	.0	21	6
Heating, Air Conditioning, & Refrigeration Mechanics & Installers	339	.2	414	109
Precision Instrument Repairers	513	.3	642	180
Installers/Repairers - Manufactured Buildings	21	.0	22	3
Coin & Vending Machine Servicers & Repairers	110	.1	112	12
Menders - Garments, Linens, & Related	31	.0	38	11
All Other Mechanics, Installers, & Repairers	609	.4	764	216
Construction Trades & Extraction	1,734	1.2	1,961	414
Carpenters	510	.3	578	135
Electricians	544	.4	621	133
Brick Masons	11	.0	11	1
Concrete & Terrazzo Finishers	103	.1	114	18
Painters & Paperhangers - Construction & Maintenance	106	.1	131	39
Plumbers, Pipefitters, & Steamfitters	235	.2	262	52
All Other Construction Trades Workers	89	.1	103	20
Extraction & Related Workers - Incl. Blasters	136	.1	141	16
Precision Production Occupations	8,681	5.8	10,252	2,610
Tool & Die Makers	619	.4	741	224
Precision Instrument Makers	10	.0	13	5
Machinists	2,779	1.9	3,226	754
Tool Grinders, Filers, Sharpeners (Precision)	175	.1	208	54
Pattern & Model Makers, Metal	9	.0	11	3
Precision Layout Workers, Metal	114	.1	135	31
Jewelers & Silversmiths	39	.0	54	23
Precision Hand Workers, Jewelry & Related	44	.0	59	21
Precision Etchers & Engravers	9	.0	12	4
Sheet Metal Workers	710	.5	850	194
Boilermakers	124	.1	130	21
All Other Precision Metal Workers	160	.1	193	60
Pattern & Model Makers, Wood (Exc. Carpenters)	24	.0	29	9
Wood Machinists	310	.2	352	79
Cabinetmakers & Bench Carpenters	709	.5	824	179
Furniture Finishers	21	.0	22	2
All Other Precision Woodworkers	89	.1	105	26
Fabric & Apparel Layout & Patternmakers	25	.0	31	9
Upholsterers	81	.1	111	43
Shoe & Leather Workers & Repairers - Precision	28	.0	33	9
All Other Precision Textile & Apparel Workers	10	.0	11	4
Precision Compositors/Typesetters/Arrangers	191	.1	229	69
Job Printers	161	.1	193	58
Precision Lithography & Photoengraving Workers	328	.2	392	84
Bookbinders	37	.0	44	14
All Other Precision Printing Workers	124	.1	147	38

ESTIMATED EMPLOYMENT AND JOB OPENINGS

MANUFACTURING

STATEWIDE (CONTD.)

	ESTIMATED MAY 1983 EMPLOYMENT	PERCENT OF MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	TOTAL JOB OPENINGS 1983-1987
Food Batchmakers	161	.1	156	18
Precision Foundry Mold & Core Makers	137	.1	150	25
Precision Molders/Casters, Exc. Jewelry & Foundry	80	.1	99	28
Precision Detail Design Decorators & Painters	135	.1	173	52
Precision Photographic Process Workers	10	.0	12	3
Precision Optical Goods Workers	572	.4	783	317
Gem & Diamond Workers	15	.0	21	7
All Other Precision Workers	366	.2	435	109
Machine Setters, Operatives, & Tenders	22,904	15.3	27,003	6,961
Sawing Machine Tool Set-Up Operators - Metal & Plastic	112	.1	133	35
Lathe/Turning Machine Set-Up Operators - Metal & Plastic	325	.2	380	100
Drilling/Boring Machine Set-Up Operators - Metal & Plastic	163	.1	194	51
Milling/Planing Machine Set-Up Operators - Metal & Plastic	147	.1	175	49
Grinding & Buffing Machine Set-Up Operators - Metal & Plastic	382	.3	445	97
Machine Tool Cutting Operators & Tenders - Metal & Plastic	1,081	.7	1,312	298
Punching Machine Set-Up Operators - Metal & Plastic	162	.1	195	56
Press/Press Brake Machine Set-Up Operators - Metal & Plastic	183	.1	217	56
Shear/Slitter Machine Set-Up Operators - Metal & Plastic	87	.1	101	23
Extruding/Drawing Machine Set-Up Operators - Metal & Plastic	480	.3	514	90
Rolling Mach. Set-Up Opers. - Metal & Plastic	50	.0	55	11
Forging Mach. Set-Up Opers. - Metal & Plastic	25	.0	31	8
Machine Forming Operators & Tenders - Metal & Plastic	705	.5	858	239
Numerical Control Machine Tool Operators - Metal & Plastic	431	.3	500	129
Combination Machine Tool Set-Up Operators - Metal & Plastic	244	.2	301	82
Combination Machine Tool Operators - Metal & Plastic	254	.2	313	95
Welding Machine Setters & Set-Up Operators	209	.1	243	56
Welding Machine Operators & Tenders	194	.1	229	59
Soldering/Brazing Mach. Setters & Set-Up Opers.	7	.0	8	2
Soldering & Brazing Machine Opers. & Tenders	46	.0	54	13
Metal Fabricators, Structural Metal Products	179	.1	210	46
Plastic Molding & Casting Machine Set-Up Opers.	214	.1	260	68
Plastic Molding & Casting Mach. Opers. & Tenders	697	.5	832	233
Metal Molding, Coremaking, & Casting Machine Set-Up	35	.0	40	8
Metal Molding, Coremaking, & Casting Mach. Opers.	33	.0	41	12
Foundry Mold Assembly & Shakeout Workers	53	.0	56	9
Electrolytic Coating Machine Set-Up Operators - Metal & Plastic	265	.2	327	94
Electrolytic Coating Machine Operators - Metal & Plastic	202	.1	239	62
Nonelectrolytic Coating Machine Set-Up - Metal & Plastic	23	.0	28	6
Nonelectrolytic Coating Machine Operators - Metal & Plastic	52	.0	62	16
Heating Equip. Set-Up Opers. - Metal & Plastic	32	.0	35	6
Heat Treating/Tempering Machine Operators - Metal & Plastic	134	.1	147	32

ESTIMATED EMPLOYMENT AND JOB OPENINGS

MANUFACTURING

STATEWIDE (CONTD.)

	ESTIMATED MAY 1983 EMPLOYMENT	PERCENT OF MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	TOTAL JOB OPENINGS 1983-1987
Heaters, Metal & Plastic	8	.0	9	2
All Other Metal & Plastic Mach. Set-Up Opers.	45	.0	51	10
All Other Metal & Plastic Machine Operators	393	.3	448	110
Sawing Machine Setters & Set-Up Operators	19	.0	22	5
Head Sawyers	25	.0	27	5
Sawing Machine Operators & Tenders	408	.3	489	131
Woodworking Machine Set-Up Opers., Exc. Sawing	136	.1	161	42
Woodworking Mach. Opers. & Tenders, Exc. Sawing	268	.2	317	81
Offset Litho. Press Setters & Set-Up Opers.	389	.3	464	140
Letter Press Setters & Set-Up Operators	348	.2	414	97
All Other Printing Press Set-Up Operators	55	.0	70	21
Photoengraving & Lithographing Photographers	161	.1	192	41
Speciality Materials Printing Mach. Set-Up Opers.	29	.0	37	12
Screen Printing Machine Setters & Set-Up Opers.	118	.1	152	62
Bindery Machine Setters & Set-Up Operators	124	.1	147	43
Typesetting & Composing Mach. Opers. & Tenders	289	.2	346	135
Printing Press Machine Operators & Tenders	563	.4	673	179
Photoengraving & Lithographing Machine Opers.	28	.0	34	9
Bindery Machine Operators	315	.2	377	100
All Other Printing & Related Machine Opers.	80	.1	97	30
Textile Mach. Opers. - Winding/Weaving/Cutting	260	.2	303	79
Sewing Machine Operators, Garment	2,740	1.8	3,204	850
Sewing Machine Operators, Non-Garment	478	.3	579	169
Shoe Sewing Machine Operators & Tenders	32	.0	37	9
Pressing Machine Opers. - Textile & Garments	61	.0	69	16
Electronic Semiconductor Processors	2,387	1.6	3,085	995
Paper Goods Machine Setters & Set-Up Operators	63	.0	75	19
Cooking Machine Operators & Tenders, Food	59	.0	60	10
Roasting, Baking, & Drying Mach. Opers., Food	115	.1	112	13
Furnace, Kiln, Oven, Drier, or Kettle Opers.	127	.1	143	34
Boiler Operators & Tenders, Low Pressure	55	.0	55	6
Cooling & Freezing Equip. Opers. & Tenders	24	.0	23	3
Dairy Processing Equip. Opers., Incl. Setters	66	.0	63	9
Chemical Equipment Controllers & Operators	75	.1	86	20
Chemical Equipment Tenders	36	.0	40	9
Cutting & Slicing Mach. Setters & Set-Up Opers.	23	.0	26	6
Cutting & Slicing Machine Operators & Tenders	304	.2	347	79
Coating & Painting Machine Set-Up Operators	209	.1	260	77
Coating, Painting, & Spraying Machine Opers.	350	.2	416	109
Cementing & Gluing Machine Operators & Tenders	111	.1	138	41
Cleaning, Washing, & Pickling Equipment Opers.	85	.1	95	20
Separating & Filtering Machine Operators	159	.1	156	18
Crushing, Grinding, & Mixing Machine Operators	754	.5	836	171
Extruding/Forming/Pressing Mach. Set-Up Opers.	123	.1	142	34
Extruding, Forming, & Pressing Machine Opers.	488	.3	577	148
Packaging & Filling Machine Opers. & Tenders	1,408	.9	1,564	323
All Other Machine Setters & Set-Up Operators	252	.2	282	60
All Other Machine Operators & Tenders	812	.5	925	210
Assemblers & Fabricators	20,424	13.6	25,407	8,239
Aircraft Assemblers - Precision	310	.2	404	157
Machine Builders & Assemblers	531	.4	654	175
Fitters, Structural Metal - Precision	121	.1	143	37
Electromech. Equip. Assemblers - Precision	1,523	1.0	1,873	653
Electrical/Electronic Equipment Assemblers - Precision	8,275	5.5	10,602	4,001
All Other Precision Assemblers, Metal	124	.1	147	34
Machine Assemblers	404	.3	495	141
Electrical & Electronic Assemblers	2,196	1.5	2,721	794
Coil Winders, Tapers, & Finishers	184	.1	221	60
Glaziers, Manufacturing	67	.0	81	20
Welders & Cutters	817	.5	945	209
Solderers & Brazers	36	.0	44	12
Pressers, Hand	60	.0	67	14

ESTIMATED EMPLOYMENT AND JOB OPENINGS

MANUFACTURING

STATEWIDE (CONTD.)

	ESTIMATED MAY 1983 EMPLOYMENT	PERCENT OF MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	TOTAL JOB OPENINGS 1983-1987
Portable Machine Cutters	39	.0	45	11
Cannery Workers	86	.1	85	10
Meat, Poultry, & Fish Cutters - Hand	87	.1	86	10
Metal Pourers & Casters, Basic Shapes	36	.0	37	4
Molders & Casters, Hand	164	.1	178	30
Painting, Coating, & Decorating Workers, Hand	101	.1	124	33
Grinding & Polishing Workers, Hand	262	.2	324	94
Assemblers/Fabricators - Exc. Machine, Electrical & Precision	3,939	2.6	4,896	1,440
All Other Hand Workers	955	.6	1,104	263
Plant & System Occupations	192	.1	217	49
Chemical Plant & System Operators	15	.0	17	4
Stationary Engineers	69	.0	78	17
All Other Plant & System Operators	108	.1	122	28
Transportation & Material Moving Workers	6,025	4.0	6,638	1,103
Truck Drivers, Heavy or Tractor Trailer	1,917	1.3	2,128	361
Truck Drivers, Light - Incl. Delivery & Route	1,086	.7	1,218	218
Driving Sales Workers	921	.6	978	124
All Other Motor Vehicle Operators	88	.1	111	30
All Rail Vehicle Opers. & Controllers	5	.0	5	0
All Other Transportation & Related Workers	28	.0	28	3
Grader, Dozer, & Scraper Operators	40	.0	42	7
Hoist & Winch Operators	17	.0	18	3
Crane & Tower Operators	202	.1	215	28
Industrial Truck & Tractor Operators	1,062	.7	1,181	202
Conveyor Operators & Tenders	249	.2	272	52
Pump Operators	175	.1	192	38
Operating Engineers	119	.1	135	28
All Other Material Moving Equipment Operators	116	.1	115	9
Helpers, Laborers, & Material Movers, Hand	6,130	4.1	6,849	1,444
Mechanic & Repairer Helpers	186	.1	211	47
Construction & Extraction Worker Helpers	222	.1	240	44
Machine Feeders & Offbearers	830	.6	939	209
Freight, Stock, & Material Movers, Hand	1,150	.8	1,312	300
Hand Packers & Packagers	960	.6	1,087	241
Vehicle Washers & Equipment Cleaners	15	.0	15	0
All Other Helpers & Laborers	2,767	1.8	3,045	603
TOTAL ALL OCCUPATIONS	149,921	100.0	179,888	48,914

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Other Life Scientists
Foresters & Conservation Scientists

All Other Health Professionals, Paraprofessionals, & Technical Workers
Opticians, Dispensing & Measuring

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other Electrical Mechs./Installers/Repairers
Electrical Installers & Repairers, Transportation Equipment

All Other Mechanics, Installers, & Repairers
Mechanical Control & Valve Installers & Repairers
Riggers

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING (CONTD.)

All Other Precision Woodworkers
Precision Woodworkers
Pattern Markers, Wood

All Other Precision Workers
Medical Appliance Makers

All Other Printing Press Set-up Operators
Printing Press Machine Setters & Set-up Operators

All Other Machine Setters & Set-up Operators
Textile Machine Setters & Set-up Operators

All Other Machine Operators & Tenders
Painters, Transportation Equipment

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

APACHE COUNTY

	ESTIMATED MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1983-1987	JOB OPENINGS DUE TO SEPARATIONS 1983-1987	TOTAL JOB OPENINGS 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	14	15	1	1	2
General Managers & Top Executives	9	10	1	1	2
All Other Managers & Administrators	5	5	0	0	0
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	10	11	1	1	2
All Financial Specialists	4	5	1	1	2
All Other Management Support Workers	2	2	0	0	0
All Engineers	2	2	0	0	0
Electrical/Electronic Engineering Technicians	2	2	0	0	0
SALES & RELATED OCCUPATIONS	1	1	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	39	45	6	8	14
Stock Clerks - Stockroom, Warehouse, or Yard	5	6	1	1	2
All Other Material Recording/Scheduling/Dist.	18	21	3	3	6
All Other Clerical & Administrative Support	16	18	2	4	6
SERVICE OCCUPATIONS	3	3	0	1	1
All Cleaning/Building Service, Exc. Private House	3	3	0	1	1
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	56	61	5	4	9
Log Handling Equipment Operators	8	9	1	1	2
Logging Tractor Operators	27	30	3	2	5
All Other Timber Cutting & Related Workers	13	14	1	1	2
All Other Agri., Forestry, Fishing, & Related	8	8	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	307	361	54	42	96
All First Line Managers/Supervisors - Maintenance/Production/Construction	19	22	3	2	5
Precision Inspectors, Testers, & Graders	39	48	9	5	14
All Other Inspectors, Testers, & Related	7	8	1	1	2
All Machinery Maintenance Mechanics	6	7	1	1	2
All Other Mechanics, Installers, & Repairers	12	13	1	1	2
All Construction Trades Workers	9	10	1	0	1
All Precision Metal Workers	3	3	0	0	0
All Metal & Plastic Machine Operators	19	21	2	1	3
Plastic Molding & Casting Mach. Opers. & Tenders	15	18	3	2	5
All Other Machine Operators & Tenders	42	47	5	5	10
All Precision Assemblers, Metal	111	136	25	22	47
Truck Drivers, Heavy or Tractor Trailer	6	7	1	0	1
All Other Material Moving Equipment Operators	3	3	0	0	0
All Helpers & Laborers	16	18	2	2	4
TOTAL ALL OCCUPATIONS	430	497	67	57	124

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Other Material Recording/Scheduling/Dist.
Weighers, Measurers, & Checkers - Records
Traffic, Shipping, & Receiving Clerks

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All First Line Managers/Supervisors - Maintenance/Production/Construction
First Line Mgrs./Supers. - Production & Opers.
First Line Mgrs./Supers. - Laborers & Helpers

All Other Inspectors, Testers, & Related
Production Inspectors, Testers, & Graders

All Other Mechanics, Installers, & Repairers
Machinery Maintenance Workers

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING (CONTD.)

All Construction Trades Workers
Concrete & Terrazzo Finishers

All Other Machine Operators & Tenders
Head Sawyers
Sawing Machine Operators & Tenders
Woodworking Mach. Opers. & Tenders, Exc. Sawing

All Precision Assemblers, Metal
Electrical/Electronic Equipment Assemblers-Precision

All Helpers & Laborers
Machine Feeders & Offbearers

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

COCHISE COUNTY

	ESTIMATED MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1983-1987	JOB OPENINGS DUE TO SEPARATIONS 1983-1987	TOTAL JOB OPENINGS 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	68	82	14	9	23
Industrial Production Managers	6	7	1	1	2
General Managers & Top Executives	36	43	7	5	12
All Other Managers & Administrators	26	32	6	3	9
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	130	154	24	12	36
Accountants & Auditors	5	6	1	1	2
All Other Management Support Workers	7	8	1	1	2
Industrial Engineers, Exc. Safety	6	7	1	0	1
All Other Engineers	15	17	2	0	2
Electrical/Electronic Engineering Technicians	9	11	2	1	3
Drafters	8	10	2	1	3
All Other Engineering & Related Technicians	2	2	0	0	0
Chemists, Exc. Biochemists	13	14	1	1	2
Computer Programmers	19	23	4	1	5
All Health Professionals, Paraprofessionals, & Technicians	1	1	0	0	0
Writers & Editors	12	15	3	2	5
Reporters & Correspondents	14	17	3	3	6
All Other Professional, Paraprofessional, & Technical Workers	19	23	4	1	5
SALES & RELATED OCCUPATIONS	29	35	6	0	6
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	148	175	27	27	54
Secretaries	20	24	4	5	9
Bookkeeping, Accounting, & Auditing Clerks	24	28	4	5	9
General Office Clerks	34	40	6	7	13
All Office Machine Operators	4	5	1	0	1
All Communication Equipment Operators	2	2	0	1	1
All Material Recording/Scheduling/Dist.	10	12	2	1	3
Stock Clerks - Stockroom, Warehouse, or Yard	9	11	2	1	3
Traffic, Shipping, & Receiving Clerks	9	11	2	1	3
All Other Clerical & Administrative Support	36	42	6	6	12
SERVICE OCCUPATIONS	24	27	3	4	7
Guards & Watch Guards	10	10	0	1	1
Janitors & Cleaners, Exc. Maids & Housekeeping	14	17	3	3	6
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	4	4	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	1,029	1,137	109	109	218
First Line Managers/Supervisors - Mechanics/Installers/Repairers	15	16	1	2	3
First Line Mgrs./Supers. - Production & Opers.	68	73	5	5	10
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	4	4	0	0	0
Production Inspectors, Testers, & Graders	29	32	3	3	6
All Other Inspectors, Testers, & Graders	3	4	1	0	1
All Machinery Maintenance Mechanics	10	12	2	0	2
Refractory Matls. Repairers, Exc. Brick Masons	5	5	0	0	0
Maintenance Repairers, General Utility	35	39	4	3	7
Precision Instrument Repairers	8	8	0	1	1
All Other Mechanics, Installers, & Repairers	16	19	3	1	4
Electricians	14	14	0	1	1
Plumbers, Pipefitters, & Steamfitters	16	16	0	2	2
All Other Construction Trades Workers	7	7	0	1	1
Extraction & Related Workers - Incl. Blasters	11	11	0	1	1
Tool & Die Makers	5	6	1	1	2
Machinists	28	31	3	3	6
All Other Precision Metal Workers	4	4	0	0	0
Precision Compositors/Typesetters/Arrangers	5	6	1	1	2
All Other Precision Printing Workers	5	6	1	0	1
All Precision Food & Tobacco Workers	2	2	0	0	0
All Other Precision Workers	6	7	1	1	2

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

COCHISE COUNTY (CONTD.)

	ESTIMATED MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1983-1987	JOB OPENINGS DUE TO SEPARATIONS 1983-1987	TOTAL JOB OPENINGS 1983-1987
Furnace Operators & Tenders	32	31	0	4	4
All Metal & Plastic Mach. Set-Up Opers.	9	10	1	0	1
All Metal & Plastic Machine Operators	1	1	0	0	0
All Printing & Related Machine Opers.	13	16	3	2	5
Sewing Machine Operators, Garment	153	169	16	20	36
Sewing Machine Operators, Non-Garment	16	19	3	2	5
Boiler Operators & Tenders, Low Pressure	7	7	0	1	1
Coating, Painting, & Spraying Machine Opers.	11	13	2	1	3
Separating & Filtering Machine Operators	7	7	0	1	1
Crushing, Grinding, & Mixing Machine Operators	16	18	2	2	4
All Other Machine Operators & Tenders	13	16	3	1	4
Electrical/Electronic Equipment Assemblers - Precision	22	27	5	4	9
All Other Precision Assemblers, Metal	4	5	1	1	2
Coil Winders, Tapers, & Finishers	14	17	3	2	5
Welders & Cutters	3	4	1	0	1
Pressers, Hand	28	31	3	3	6
Metal Pourers & Casters, Basic Shapes	7	7	0	1	1
All Other Hand Workers	49	50	1	5	6
Stationary Engineers	21	22	1	2	3
All Other Plant & System Operators	46	54	8	5	13
Truck Drivers, Heavy or Tractor Trailer	52	61	9	4	13
Truck Drivers, Light - Incl. Delivery & Route	16	19	3	1	4
All Other Motor Vehicle Operators	11	14	3	1	4
Hoist & Winch Operators	6	6	0	1	1
Crane & Tower Operators	15	15	0	1	1
Industrial Truck & Tractor Operators	10	12	2	1	3
Conveyor Operators & Tenders	7	7	0	1	1
All Other Material Moving Equipment Operators	5	5	0	0	0
All Other Freight & Material Movers, Hand	8	9	1	1	2
All Other Helpers & Laborers	131	143	12	15	27
TOTAL ALL OCCUPATIONS	1,432	1,614	183	161	344

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows.

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Other Professionals, Paraprofessionals, & Technical Workers
Systems Analysts, Electronic Data Processing

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Other Clerical & Administrative Support
Advertising Clerks

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other Mechanics, Installers, & Repairers
Bus & Truck Mechs., & Diesel Eng. Specialists

All Printing & Related Machine Opers.
Printing Press Machine Operators & Tenders

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING (CONTD.)

All Other Machine Operators & Tenders
Furnace, Kiln, Oven, Drier, or Kettle Opers.

All Other Hand Workers
Meat, Poultry, & Fish Cutters - Hand

All Other Motor Vehicle Operators
Driving Sales Workers

All Other Helpers & Laborers
Construction & Extraction Worker Helpers

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

COCONINO COUNTY

	ESTIMATED MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1983-1987	JOB OPENINGS DUE TO SEPARATIONS 1983-1987	TOTAL JOB OPENINGS 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	150	171	21	19	40
Personnel, Training, & Labor Relations Mgrs.	5	6	1	1	2
Industrial Production Managers	14	16	2	2	4
General Managers & Top Executives	83	96	13	11	24
All Other Managers & Administrators	48	53	5	5	10
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	182	210	28	17	45
Accountants & Auditors	13	15	2	2	4
Purchasing Agents, Exc. Wholesale, Retail, & Farm	12	14	2	2	4
All Other Management Support Workers	12	13	1	1	2
All Engineers	24	27	3	1	4
Mechanical Engineering Techs.	34	41	7	1	8
Drafters	6	7	1	1	2
All Other Engineering & Related Technicians	12	12	0	1	1
All Physical Scientists	3	4	1	0	1
All Life Scientists	11	12	1	1	2
All Physical & Life Science Techs.	17	19	2	2	4
Writers & Editors	9	11	2	2	4
Reporters & Correspondents	16	20	4	3	7
All Other Professional, Paraprofessional, & Technical Workers	13	15	2	0	2
SALES & RELATED OCCUPATIONS	83	99	16	12	28
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	251	287	36	46	82
Proofreaders & Copy Markers	6	7	1	1	2
Secretaries	48	56	8	11	19
Order Clerks - Materials, Merch., & Service	32	37	5	7	12
Bookkeeping, Accounting, & Auditing Clerks	25	29	4	5	9
Payroll & Timekeeping Clerks	8	9	1	1	2
Billing, Cost & Rate Clerks	14	15	1	1	2
General Office Clerks	26	30	4	6	10
All Office Machine Operators	12	13	1	1	2
All Communication Equipment Operators	4	4	0	1	1
Production, Planning, & Expediting Clerks	8	9	1	2	3
Measurers & Samplers - Recordkeeping	6	7	1	1	2
Stock Clerks - Stockroom, Warehouse, or Yard	16	19	3	2	5
Traffic, Shipping, & Receiving Clerks	26	30	4	3	7
All Other Material Recording/Scheduling/Dist.	1	1	0	0	0
All Other Clerical & Administrative Support	19	21	2	4	6
SERVICE OCCUPATIONS	49	58	9	9	18
All Service Supervisors & Managers	3	4	1	1	2
Guards & Watch Guards	5	6	1	0	1
All Food Service Workers	1	1	0	0	0
Janitors & Cleaners, Exc. Maids & Housekeeping	26	30	4	5	9
All Other Cleaning/Building Service, Exc. Private House	1	1	0	0	0
All Other Service Workers	13	16	3	3	6
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	71	78	7	4	11
All Timber Cutting & Related Workers	59	65	6	3	9
Log Graders & Scalers	11	12	1	1	2
All Other Agri., Forestry, Fishing, & Related	1	1	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	1,432	1,642	211	157	368
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	16	19	3	2	5
First Line Mgrs./Supers. - Production & Opers.	72	83	11	5	16
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	11	13	2	2	4
Production Inspectors, Testers, & Graders	58	70	12	7	19

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

COCONINO COUNTY (CONTD.)

	ESTIMATED MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1983-1987	JOB OPENINGS DUE TO SEPARATIONS 1983-1987	TOTAL JOB OPENINGS 1983-1987
All Other Inspectors, Testers, & Related	7	7	0	1	1
Machinery Maintenance Mechanics	33	40	7	3	10
All Other Machinery Maintenance Mechanics	3	3	0	0	0
Machinery Maintenance Workers	17	20	3	2	5
Maintenance Repairers, General Utility	16	19	3	1	4
Automotive Mechanics	5	6	1	0	1
All Other Mechanics, Installers, & Repairers	17	18	1	1	2
Carpenters	8	9	1	1	2
Electricians	24	27	3	2	5
All Other Construction Trades Workers	1	1	0	0	0
Machinists	68	80	12	7	19
All Other Precision Metal Workers	3	3	0	0	0
All Precision Woodworkers	51	57	6	6	12
All Precision Printing Workers	3	4	1	0	1
All Precision Food & Tobacco Workers	2	2	0	0	0
Medical Appliance Makers	69	84	15	9	24
All Other Precision Workers	17	20	3	1	4
All Metal & Plastic Mach. Set-Up Opers.	1	1	0	0	0
All Metal & Plastic Machine Operators	104	103	0	12	12
Sawing Machine Operators & Tenders	54	60	6	6	12
Woodworking Mach. Opers. & Tenders, Exc. Sawing	22	24	2	3	5
All Printing Press Set-Up Operators	3	4	1	0	1
All Printing Setters & Set-Up Opers.	7	9	2	0	2
Typesetting & Composing Mach. Opers. & Tenders	12	15	3	3	6
Printing Press Machine Operators & Tenders	14	17	3	2	5
All Other Printing & Related Machine Opers.	4	5	1	0	1
Electronic Semiconductor Processors	30	36	6	4	10
Crushing, Grinding, & Mixing Machine Operators	56	66	10	7	17
Packaging & Filling Machine Opers. & Tenders	61	75	14	7	21
All Other Machine Setters & Set-Up Operators	18	20	2	2	4
All Other Machine Operators & Tenders	111	127	16	15	31
Electrical/Electronic Equipment Assemblers - Precision	19	23	4	4	8
Assemblers/Fabricators - Exc. Machine, Electrical, & Precision	10	12	2	1	3
All Other Hand Workers	9	10	1	1	2
All Plant & System Operators	1	1	0	0	0
Truck Drivers, Heavy or Tractor Trailer	45	51	6	3	9
Truck Drivers, Light - Incl. Delivery & Route	22	26	4	2	6
Driving Sales Workers	25	31	6	2	8
All Other Transportation & Related Workers	4	4	0	0	0
Industrial Truck & Tractor Operators	24	29	5	2	7
All Other Material Moving Equipment Operators	182	201	19	20	39
Freight, Stock, & Material Movers, Hand	18	20	2	2	4
All Other Helpers & Laborers	75	87	12	9	21
TOTAL ALL OCCUPATIONS	2,218	2,545	328	264	592

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Engineers
Mechanical Engineers

All Other Engineering & Related Technicians
Electrical/Electronic Engineering Technicians

All Life Scientists
Foresters & Conservation Scientists

All Physical & Life Science Techs.
Chemical Techs., Exc. Health

SALES & RELATED OCCUPATIONS

Sales Engineers
Other Sales Representatives, Exc. Retail

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Office Machine Operators
Data Keyers, Composing

All Other Clerical & Administrative Support
Receptionists & Information Clerks

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

COCONINO COUNTY (CONTD.)

AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS

All Timber Cutting & Related Workers
- Fallers & Buckers
- Log Handling Equipment Operators
- Logging Tractor Operators

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other First Line Managers/Supervisors - Maintenance/Production/Construction
- First Line Managers/Supervisors - Construction Trades & Extraction Workers

All Other Inspectors, Testers, & Related
- Precision Inspectors, Testers, & Graders

All Other Mechanics, Installers, & Repairers
- Coin & Vending Machine Servicers & Repairers

All Precision Woodworkers
- Wood Machinists
- Cabinetmakers & Bench Carpenters

All Other Precision Workers
- Precision Molders/Casters, Exc. Jewelry & Foundry

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING (CONTD.)

All Metal & Plastic Machine Operators
- Machine Tool Cutting Operators & Tenders - Metal & Plastic

All Printing Setters & Set-Up Opers.
- Photoengraving & Lithographing Photographers

All Other Machine Setters & Set-Up Operators
- Paper Goods Machine Setters & Set-Up Operators

All Other Machine Operators & Tenders
- Head Sawyers
- Sewing Machine Operators, Garment
- Cooking Machine Operators & Tenders, Food
- Roasting, Baking, & Drying Mach. Opers., Food
- Boiler Operators & Tenders, Low Pressure
- Coating, Painting, & Spraying Machine Opers.
- Cementing & Gluing Machine Operators & Tenders

All Other Material Moving Equipment Operators
- Grader, Dozer, & Scraper Operators
- Pump Operators

All Other Helpers & Laborers
- Construction & Extraction Worker Helpers
- Machine Feeders & Offbearers

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

GILA COUNTY

	ESTIMATED MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1983-1987	JOB OPENINGS DUE TO SEPARATIONS 1983-1987	TOTAL JOB OPENINGS 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	25	29	4	3	7
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	44	46	2	3	5
All Financial Specialists	1	1	0	0	0
All Other Management Support Workers	2	2	0	0	0
Metallurgical & Materials Engineers	12	12	0	1	1
All Other Engineers	5	5	0	0	0
All Engineering & Related Technicians	5	5	0	0	0
All Physical Scientists	6	6	0	0	0
All Physical & Life Science Techs.	1	1	0	0	0
All Health Professionals, Paraprofessionals, & Technicians	2	2	0	0	0
Writers & Editors	5	6	1	1	2
All Other Professional, Paraprofessional, & Technical Workers	5	6	1	1	2
SALES & RELATED OCCUPATIONS	12	15	3	2	5
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	77	82	5	14	19
Secretaries	16	18	2	4	6
Bookkeeping, Accounting, & Auditing Clerks	23	24	1	4	5
General Office Clerks	6	7	1	1	2
All Office Machine Operators	7	8	1	2	3
All Communication Equipment Operators	1	1	0	0	0
All Material Recording/Scheduling/Dist.	14	14	0	2	2
All Other Clerical & Administrative Support	10	10	0	1	1
SERVICE OCCUPATIONS	10	10	0	2	2
All Service Supervisors & Managers	1	1	0	0	0
All Protective Service Workers	2	2	0	0	0
All Food Service Workers	3	3	0	1	1
All Cleaning/Building Service, Exc. Private House	4	4	0	1	1
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	10	11	1	1	2
First Line Supervisors - Agri., Forestry, & Rel.	4	4	0	0	0
Log Graders & Scalers	6	7	1	1	2
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	1,115	1,101	15	108	123
First Line Mgrs./Supers. - Production & Opers.	107	104	0	7	7
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	28	28	0	5	5
All Inspectors, Testers, & Related	6	6	0	0	0
All Machinery Maintenance Mechanics	27	26	0	2	2
Maintenance Repairers, General Utility	20	20	0	2	2
Automotive Mechanics	10	10	0	1	1
All Other Mechanics, Installers, & Repairers	36	35	1	2	3
Electricians	47	45	0	4	4
All Other Construction Trades Workers	45	44	0	4	4
All Extraction Workers, Exc. Helpers	1	1	0	0	0
All Precision Metal Workers	109	105	0	12	12
All Precision Printing Workers	3	3	0	0	0
All Other Precision Workers	1	1	0	0	0
Heat Treating/Tempering Machine Operators - Metal & Plastic	55	53	0	7	7
Furnace Operators & Tenders	60	58	0	7	7
All Metal & Plastic Mach. Set-Up Opers.	44	43	0	4	4
Woodworking Machine Set-Up Opers., Exc. Sawing	6	7	1	1	2
All Printing & Related Machine Opers.	8	9	1	0	1
All Other Machine Setters & Set-Up Operators	11	15	4	1	5
All Other Machine Operators & Tenders	57	55	0	6	6
All Hand Workers	3	4	1	0	1
All Plant & System Operators	5	5	0	1	1
Truck Drivers, Heavy or Tractor Trailer	42	46	4	3	7

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

GILA COUNTY (CONTD.)

	ESTIMATED MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1983-1987	JOB OPENINGS DUE TO SEPARATIONS 1983-1987	TOTAL JOB OPENINGS 1983-1987
All Other Motor Vehicle Operators	3	4	1	0	1
All Rail Vehicle Opers. & Controllers	5	5	0	0	0
Industrial Truck & Tractor Operators	23	25	2	2	4
All Other Material Moving Equipment Operators	77	74	0	6	6
Construction & Extraction Worker Helpers	32	31	0	4	4
All Freight & Material Movers, Hand	1	1	0	0	0
All Other Helpers & Laborers	243	238	0	27	27
TOTAL ALL OCCUPATIONS	1,293	1,294	30	133	163

Confidential data for certain occupations have been added to "All" or "All Other categories or collapsed into major occupational classes as follows:

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

- All Material Recording/Scheduling/Dist.
  - Measurers & Samplers - Recordkeeping
  - Stock Clerks - Stockroom, Warehouse, or Yard

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

- All Other First Line Managers/Supervisors - Maintenance/Production/Construction
  - First Line Managers/Supervisors - Construction Trades & Extraction Workers
  - First Line Mgrs./Supers. - Transport. Operatives
  - First Line Mgrs./Supers. - Laborers & Helpers

- All Machinery Maintenance Mechanics
  - Machinery Maintenance Mechanics

- All Other Mechanics, Installers, & Repairers
  - Refractory Matls. Repairers, Exc. Brick Masons
  - Precision Instrument Repairers

- All Other Construction Trades Workers
  - Carpenters
  - Plumbers, Pipefitters, & Steamfitters

- All Precision Metal Workers
  - Machinists
  - Boilermakers

- All Metal & Plastic Mach. Set-Up Opers.
  - Extruding/Drawing Machine Set-Up Operators - Metal & Plastic
  - Heating Equip. Set-Up Opers. - Metal & Plastic

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING (CONTD.)

- All Other Machine Setters & Set-Up Operators
  - Coating & Painting Machine Set-Up Operators

- All Other Machine Operators & Tenders
  - Separating & Filtering Machine Operators
  - Crushing, Grinding, & Mixing Machine Operators

- All Plant & System Operators
  - Stationary Engineers

- All Other Material Moving Equipment Operators
  - Crane & Tower Operators
  - Conveyor Operators & Tenders

- All Freight & Material Movers, Hand
  - Freight, Stock, & Material Movers, Hand

- All Other Helpers & Laborers
  - Mechanic & Repairer Helpers
  - Machine Feeders & Offbearers

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

GRAHAM & GREENLEE COUNTIES

	ESTIMATED MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1983-1987	JOB OPENINGS DUE TO SEPARATIONS 1983-1987	TOTAL JOB OPENINGS 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	12	14	2	0	2
General Managers & Top Executives	11	13	2	0	2
All Other Managers & Administrators	1	1	0	0	0
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	15	16	1	0	1
All Financial Specialists	2	2	0	0	0
Metallurgical & Materials Engineers	6	6	0	0	0
All Other Engineering & Related Technicians	1	1	0	0	0
All Other Professional, Paraprofessional, & Technical Workers	6	7	1	0	1
SALES & RELATED OCCUPATIONS	9	11	2	1	3
All Sales Representatives & Salespersons, Service	3	4	1	0	1
All Other Sales & Related Workers	6	7	1	1	2
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	26	30	4	5	9
Secretaries	1	1	0	0	0
General Office Clerks	12	14	2	3	5
All Office Machine Operators	3	4	1	1	2
All Material Recording/Scheduling/Dist.	2	2	0	0	0
All Other Clerical & Administrative Support	8	9	1	1	2
SERVICE OCCUPATIONS	4	4	0	1	1
All Cleaning/Building Service, Exc. Private House	4	4	0	1	1
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	380	381	10	35	45
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	9	9	0	1	3
First Line Managers/Supervisors - Construction Trades & Extraction Workers	35	34	0	3	1
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	3	3	0	0	0
All Inspectors, Testers, & Related	7	7	0	1	1
Maintenance Repairers, General Utility	27	26	0	2	2
All Other Machinery Maintenance Mechanics	1	1	0	0	0
Coin & Vending Machine Servicers & Repairers	5	6	1	0	1
All Construction Trades Workers	4	4	0	0	0
All Precision Printing Workers	4	5	1	1	2
All Precision Food & Tobacco Workers	4	4	0	0	0
Furnace Operators & Tenders	99	95	0	11	11
All Other Machine Operators & Tenders	9	10	1	0	1
All Hand Workers	5	5	0	0	0
Driving Sales Workers	19	23	4	1	5
All Other Motor Vehicle Operators	3	4	1	0	1
Crane & Tower Operators	7	7	0	0	0
Industrial Truck & Tractor Operators	30	32	2	2	4
All Other Material Moving Equipment Operators	8	8	0	1	1
Mechanic & Repairer Helpers	24	23	0	3	3
Machine Feeders & Offbearers	15	14	0	2	2
All Other Helpers & Laborers	62	61	0	7	7
TOTAL ALL OCCUPATIONS	446	456	19	42	61

Confidential data for certain occupations have been added to "All" or "All Other categories or collapsed into major occupational classes as follows:

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Inspectors, Testers, & Related	All Other Helpers & Laborers
Production Inspectors, Testers, & Graders	Hand Packers & Packagers

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

MARICOPA COUNTY

	ESTIMATED MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1983-1987	JOB OPENINGS DUE TO SEPARATIONS 1983-1987	TOTAL JOB OPENINGS 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	7,638	9,223	1,585	1,014	2,599
Financial Managers	478	577	99	59	158
Personnel, Training, & Labor Relations Mgrs.	292	352	60	36	96
Purchasing Managers	189	233	44	20	64
Marketing, Advertising, & Public Rel. Mgrs.	775	958	183	115	298
Administrative Services Managers	421	527	106	54	160
Industrial Production Managers	1,309	1,544	235	162	397
General Managers & Top Executives	2,514	2,981	467	322	789
All Other Managers & Administrators	1,660	2,051	391	246	637
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	22,420	27,678	5,259	1,846	7,105
Accountants & Auditors	740	884	144	113	257
Budget Analysts	181	224	43	27	70
All Other Financial Specialists	103	118	15	11	26
Purchasing Agents & Buyers, Farm Products	13	12	0	1	1
Purchasing Agents, Exc. Wholesale, Retail, & Farm	629	776	147	84	231
Personnel, Training, & Labor Rel. Specialists	655	809	154	80	234
Cost Estimators	199	242	43	44	87
All Other Management Support Workers	771	966	195	114	309
Aeronautical and Astronautical Engineers	816	1,027	211	51	262
Metallurgical & Materials Engineers	33	38	5	1	6
Chemical Engineers	71	88	17	5	22
Civil Engineers, Incl. Traffic	62	78	16	9	25
Electrical & Electronic Engineers	5,215	6,444	1,229	321	1,550
Industrial Engineers, Exc. Safety	989	1,225	236	79	315
Safety Engineers, Exc. Mining	51	64	13	4	17
Mechanical Engineers	822	1,016	194	52	246
All Other Engineers	741	892	151	54	205
Civil Engineering Technicians & Technologists	29	37	8	4	12
Electrical/Electronic Engineering Technicians	3,569	4,534	965	214	1,179
Industrial Engineering Techs.	83	102	19	9	28
Mechanical Engineering Techs.	507	638	131	18	149
Drafters	919	1,159	240	78	318
All Other Engineering & Related Technicians	681	868	187	77	264
Physicists & Astronomers	13	17	4	1	5
Chemists, Exc. Biochemists	102	120	18	12	30
All Other Physical Scientists	13	16	3	1	4
Agricultural & Food Scientists	31	33	2	5	7
Biological Scientists	35	37	2	4	6
All Other Life Scientists	3	4	1	0	1
Biological, Agri., & Food Techs., Exc. Health	64	68	4	7	11
Chemical Techs., Exc. Health	139	159	20	15	35
All Other Physical & Life Science Techs.	4	4	0	0	0
Systems Analysts, Electronic Data Processing	949	1,108	159	42	201
Computer Programmers	681	788	107	35	142
Computer Programmer Aides	255	302	47	22	69
Programmers - Numerical, Tool, & Process	69	86	17	5	22
Operations & Systems Analysts, Exc. Computer	301	383	82	9	91
Statisticians	47	56	9	6	15
Lawyers	10	11	1	1	2
Health Practitioners, Technicians, & Related	47	56	9	11	20
All Other Health Diagnosing/Treating Practitioners	2	2	0	0	0
All Other Health Professionals, Paraprofessionals, & Technicians	66	86	20	11	31
Writers & Editors	402	487	85	74	159
Technical Writers	232	288	56	10	66
Public Rel. Specialists & Publicity Writers	36	42	6	6	12
Reporters & Correspondents	233	278	45	42	87
Photographers	39	47	8	4	12
Artists & Related Workers	65	78	13	12	25
Designers, Exc. Interior Designers	176	220	44	15	59
All Other Professional, Paraprofessional, & Technical Workers	527	661	134	46	180

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

MARICOPA COUNTY (CONTD.)

	ESTIMATED MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1983-1987	JOB OPENINGS DUE TO SEPARATIONS 1983-1987	TOTAL JOB OPENINGS 1983-1987
SALES & RELATED OCCUPATIONS	4,050	4,799	752	589	1,341
First Line Supervisors & Managers - Sales	378	437	59	55	114
Sales Agents, Advertising	316	378	62	44	106
Sales Engineers	441	558	117	22	139
Sales Representatives, Scientific & Related Products & Services, Exc. Retail	726	869	143	98	241
Other Sales Representatives, Exc. Retail	1,722	2,034	312	289	601
Cashiers	81	78	0	16	16
All Other Sales & Related Workers	386	445	59	65	124
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	13,495	16,292	2,797	2,603	5,400
First Line Supers.-Clerical & Admin. Support	497	606	109	68	177
Advertising Clerks	103	123	20	22	42
Proofreaders & Copy Markers	115	137	22	13	35
Secretaries	2,394	2,870	476	564	1,040
Stenographers	51	60	9	11	20
Receptionists & Information Clerks	162	194	32	36	68
Typists	200	238	38	53	91
Typists, Word Processing Equipment	138	174	36	17	53
Personnel Clerks, Exc. Payroll & Timekeeping	172	207	35	49	84
File Clerks	167	203	36	47	83
Order Clerks - Materials, Merch., & Service	498	610	112	108	220
Procurement Clerks	106	128	22	12	34
Statistical Clerks	132	168	36	30	66
Bookkeeping, Accounting, & Auditing Clerks	1,190	1,400	210	239	449
Payroll & Timekeeping Clerks	145	172	27	27	54
Billing, Cost & Rate Clerks	454	551	97	101	198
General Office Clerks	1,707	2,063	356	379	735
Billing, Posting, & Calculating Machine Opers.	60	73	13	12	25
Duplicating Machine Operators	22	26	4	5	9
Mail Machine Operators, Preparation & Handling	33	39	6	10	16
Computer Operators, Exc. Peripheral Equipment	283	335	52	31	83
Peripheral EDP Equipment Operators	56	68	12	14	26
Data Entry Keyers, Exc. Composing	419	502	83	34	117
Data Keyers, Composing	67	80	13	18	31
All Other Office Machine Operators	151	192	41	45	86
Switchboard Operators	123	148	25	34	59
Mail Clerks, Exc. Mail Machine Operators & Postal Service	15	18	3	3	6
Messengers	14	17	3	2	5
Dispatchers - Exc. Police, Fire, & Ambulance	144	171	27	13	40
Production, Planning, & Expediting Clerks	1,199	1,472	273	268	541
Measurers & Samplers - Recordkeeping	112	137	25	14	39
Stock Clerks - Stockroom, Warehouse, or Yard	1,125	1,392	267	132	399
Traffic, Shipping, & Receiving Clerks	1,076	1,291	215	126	341
All Other Material Recording/Scheduling/Dist.	151	177	26	19	45
All Other Clerical & Administrative Support	214	250	36	47	83
SERVICE OCCUPATIONS	1,535	1,852	317	228	545
First Line Supers. & Mgrs./Supers. - Service	148	180	32	31	63
Guards & Watch Guards	485	595	110	29	139
Food & Beverage Service Occupations	64	80	16	12	28
Janitors & Cleaners, Exc. Maids & Housekeeping	783	941	158	146	304
All Other Cleaning/Building Service, Exc. Private House	31	31	0	5	5
All Other Service Workers	24	25	1	5	6
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	152	159	8	19	27
All Timber Cutting & Related Workers	107	112	5	11	16
Graders & Sorters, Agricultural Products	24	23	0	4	4
Gardeners & Groundskeepers, Exc. Farm	13	16	3	3	6
All Other Agri., Forestry, Fishing, & Related	8	8	0	1	1

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

MARICOPA COUNTY (CONTD.)

	ESTIMATED MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1983-1987	JOB OPENINGS DUE TO SEPARATIONS 1983-1987	TOTAL JOB OPENINGS 1983-1987
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	58,291	69,370	11,469	6,999	18,468
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	264	310	46	39	85
First Line Managers/Supervisors - Construction Trades & Extraction Workers	60	73	13	6	19
First Line Mgrs./Supers. - Production & Opers.	3,246	3,889	643	232	875
First Line Mgrs./Supers. - Transport. Operatives	178	201	23	36	59
First Line Mgrs./Supers. - Laborers & Helpers	182	209	27	37	64
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	1	1	0	0	0
Precision Inspectors, Testers, & Graders	1,645	2,043	398	197	595
Production Inspectors, Testers, & Graders	1,736	2,082	346	206	552
Machinery Maintenance Mechanics	598	712	114	56	170
Machinery Maintenance Mechanics, Textiles	12	15	3	1	4
Machinery Maintenance Mechs., Sewing Machines	15	19	4	1	5
Machinery Maintenance Mechanics, Water & Power Generation Plants	20	22	2	2	4
All Other Machinery Maintenance Mechanics	6	7	1	0	1
Millwrights	35	38	3	5	8
Machinery Maintenance Workers	115	139	24	13	37
Maintenance Repairers, General Utility	804	929	125	75	200
Automotive Mechanics	99	106	7	8	15
Bus & Truck Mechs., & Diesel Eng. Specialists	193	207	14	17	31
Mobile Heavy Equip. Mechanics, Exc. Engines	24	26	2	1	3
Aircraft Mechanics	53	67	14	3	17
Aircraft Engine Specialists	58	73	15	2	17
Data Processing Equipment Repairers	415	450	35	23	58
Electronics Repairers, Commercial & Ind. Equip.	334	433	99	20	119
Heating, Air Conditioning, & Refrigeration Mechanics & Installers	319	390	71	30	101
Precision Instrument Repairers	265	341	76	25	101
Installers/Repairers - Manufactured Buildings	19	20	1	2	3
Coin & Vending Machine Servicers & Repairers	59	56	0	5	5
All Other Mechanics, Installers, & Repairers	521	650	129	51	180
Carpenters	434	494	60	56	116
Electricians	335	392	57	33	90
Concrete & Terrazzo Finishers	79	86	7	6	13
Painters & Paperhangers - Construction & Maintenance	75	91	16	10	26
Plumbers, Pipefitters, & Steamfitters	129	153	24	13	37
All Other Construction Trades Workers	82	94	12	5	17
Extraction & Related Workers - Incl. Blasters	56	61	5	4	9
Tool & Die Makers	487	579	92	78	170
Machinists	2,293	2,672	379	243	622
Tool Grinders, Filers, Sharpeners (Precision)	129	156	27	15	42
Pattern & Model Makers, Metal	8	10	2	1	3
Precision Layout Workers, Metal	98	117	19	8	27
Jewelers & Silversmiths	29	40	11	6	17
Precision Hand Workers, Jewelry & Related	25	34	9	4	13
Precision Etchers & Engravers	9	12	3	1	4
Sheet Metal Workers	585	703	118	42	160
All Other Precision Metal Workers	210	255	45	32	77
Pattern & Model Makers, Wood (Exc. Carpenters)	5	5	0	1	1
Wood Machinists	185	198	13	21	34
Cabinetmakers & Bench Carpenters	584	686	102	51	153
All Other Precision Woodworkers	56	62	6	6	12
Fabric & Apparel Layout & Patternmakers	16	21	5	2	7
Upholsterers	78	107	29	13	42
Shoe & Leather Workers & Repairers - Precision	16	20	4	2	6
All Other Precision Textile & Apparel Workers	5	5	0	1	1
Precision Compositors/Typesetters/Arrangers	129	155	26	20	46
Job Printers	94	112	18	15	33
Precision Lithography & Photoengraving Workers	266	318	52	16	68
Bookbinders	33	39	6	7	13
All Other Precision Printing Workers	121	145	24	14	38
Slaughterers & Butchers	129	123	0	13	13

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

MARICOPA COUNTY (CONTD.)

	ESTIMATED MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1983-1987	JOB OPENINGS DUE TO SEPARATIONS 1983-1987	TOTAL JOB OPENINGS 1983-1987
Bakers, Manufacturing	86	82	0	14	14
Food Batchmakers	113	107	0	12	12
Precision Foundry Mold & Core Makers	115	123	8	9	17
Precision Detail Design Decorators & Painters	85	105	20	8	28
Precision Optical Goods Workers	555	761	206	100	306
All Other Precision Workers	203	242	39	19	58
Sawing Machine Tool Set-Up Operators - Metal & Plastic	74	86	12	9	21
Lathe/Turning Machine Set-Up Operators - Metal & Plastic	277	324	47	38	85
Drilling/Boring Machine Set-Up Operators - Metal & Plastic	152	183	31	18	49
Milling/Planing Machine Set-Up Operators - Metal & Plastic	127	153	26	17	43
Grinding & Buffing Machine Set-Up Operators - Metal & Plastic	316	369	53	26	79
Machine Tool Cutting Operators & Tenders - Metal & Plastic	1,007	1,227	220	57	277
Punching Machine Set-Up Operators - Metal & Plastic	95	114	19	13	32
Press/Press Brake Machine Set-Up Operators - Metal & Plastic	118	136	18	14	32
Shear/Slitter Machine Set-Up Operators - Metal & Plastic	85	99	14	8	22
Extruding/Drawing Machine Set-Up Operators - Metal & Plastic	407	435	28	46	74
Rolling Mach. Set-Up Opers. - Metal & Plastic	36	42	6	4	10
Forging Mach. Set-Up Opers. - Metal & Plastic	20	25	5	2	7
Machine Forming Operators & Tenders - Metal & Plastic	429	512	83	50	133
Numerical Control Machine Tool Operators - Metal & Plastic	367	427	60	50	110
Combination Machine Tool Set-Up Operators - Metal & Plastic	123	146	23	12	35
Combination Machine Tool Operators - Metal & Plastic	61	76	15	8	23
Welding Machine Setters & Set-Up Operators	158	184	26	15	41
Welding Machine Operators & Tenders	165	192	27	19	46
Soldering/Brazing Mach. Setters & Set-Up Opers.	6	7	1	1	2
Soldering & Brazing Machine Opers. & Tenders	27	31	4	3	7
Metal Fabricators, Structural Metal Products	154	183	29	12	41
Plastic Molding & Casting Machine Set-Up Opers.	136	169	33	14	47
Plastic Molding & Casting Mach. Opers. & Tenders	460	565	105	63	168
Metal Molding, Coremaking, & Casting Machine Set-Up	27	32	5	3	8
Metal Molding, Coremaking, & Casting Mach. Opers.	9	11	2	1	3
Electrolytic Coating Machine Set-Up Operators - Metal & Plastic	237	294	57	28	85
Electrolytic Coating Machine Operators - Metal & Plastic	176	211	35	21	56
Nonelectrolytic Coating Machine Set-Up - Metal & Plastic	16	19	3	1	4
Nonelectrolytic Coating Machine Operators - Metal & Plastic	46	55	9	5	14
Heat Treating/Tempering Machine Operators - Metal & Plastic	71	85	14	10	24
Furnace Operators & Tenders	35	39	4	4	8
Heaters, Metal & Plastic	8	9	1	1	2
All Other Metal & Plastic Mach. Set-Up Opers.	95	106	11	10	21
All Other Metal & Plastic Machine Operators	227	275	48	31	79
Sawing Machine Setters & Set-Up Operators	18	21	3	2	5
Sawing Machine Operators & Tenders	231	281	50	27	77
Woodworking Machine Set-Up Opers., Exc. Sawing	120	144	24	14	38
Woodworking Mach. Opers. & Tenders, Exc. Sawing	197	239	42	23	65
Offset Litho. Press Setters & Set-Up Opers.	305	364	59	50	109
Letter Press Setters & Set-Up Operators	322	385	63	27	90

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

MARICOPA COUNTY (CONTD.)

	ESTIMATED MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1983-1987	JOB OPENINGS DUE TO SEPARATIONS 1983-1987	TOTAL JOB OPENINGS 1983-1987
All Other Printing Press Set-Up Operators	54	69	15	6	21
Photoengraving & Lithographing Photographers	113	135	22	6	28
Speciality Materials Printing Mach. Set-Up Opers.	28	36	8	4	12
Screen Printing Machine Setters & Set-Up Opers.	110	143	33	25	58
Bindery Machine Setters & Set-Up Operators	114	136	22	18	40
Typesetting & Composing Mach. Opers. & Tenders	199	238	39	53	92
Printing Press Machine Operators & Tenders	397	476	79	46	125
Photoengraving & Lithographing Machine Opers.	26	31	5	3	8
Bindery Machine Operators	267	320	53	31	84
All Other Printing & Related Machine Opers.	72	88	16	11	27
Textile Mach. Opers. - Winding/Weaving/Cutting	47	60	13	7	20
Sewing Machine Operators, Garment	1,310	1,639	329	181	510
Sewing Machine Operators, Non-Garment	268	345	77	37	114
Pressing Machine Opers. - Textile & Garments	11	14	3	2	5
Electronic Semiconductor Processors	2,357	3,061	704	282	986
Paper Goods Machine Setters & Set-Up Operators	43	53	10	5	15
Cooking Machine Operators & Tenders, Food	36	34	0	5	5
Roasting, Baking, & Drying Mach. Opers., Food	89	85	0	10	10
Furnace, Kiln, Oven, Drier, or Kettle Opers.	67	74	7	9	16
Cooling & Freezing Equip. Opers. & Tenders	21	20	0	2	2
Dairy Processing Equip. Opers., Incl. Setters	43	41	0	6	6
Chemical Equipment Controllers & Operators	42	46	4	5	9
Chemical Equipment Tenders	16	17	1	1	2
Cutting & Slicing Mach. Setters & Set-Up Opers.	13	16	3	2	5
Cutting & Slicing Machine Operators & Tenders	207	239	32	24	56
Coating & Painting Machine Set-Up Operators	180	226	46	21	67
Coating, Painting, & Spraying Machine Opers.	287	342	55	33	88
Cementing & Gluing Machine Operators & Tenders	93	119	26	11	37
Cleaning, Washing, & Pickling Equipment Opers.	63	67	4	7	11
Separating & Filtering Machine Operators	82	78	0	9	9
Crushing, Grinding, & Mixing Machine Operators	425	469	44	49	93
Extruding/Forming/Pressing Mach. Set-Up Opers.	64	75	11	7	18
Extruding, Forming, & Pressing Machine Opers.	357	430	73	42	115
Packaging & Filling Machine Opers. & Tenders	1,017	1,127	110	116	226
All Other Machine Setters & Set-Up Operators	224	248	24	26	50
All Other Machine Operators & Tenders	699	788	89	80	169
Machine Builders & Assemblers	500	618	118	48	166
Fitters, Structural Metal - Precision	119	141	22	14	36
Electromech. Equip. Assemblers - Precision	388	491	103	76	179
Electrical/Electronic Equipment Assemblers - Precision	7,352	9,435	2,083	1,447	3,530
All Other Precision Assemblers, Metal	156	188	32	16	48
Machine Assemblers	325	391	66	38	104
Electrical & Electronic Assemblers	1,179	1,439	260	138	398
Coil Winders, Tapers, & Finishers	95	115	20	11	31
Glaziers, Manufacturing	26	28	2	2	4
Welders & Cutters	633	733	100	59	159
Solderers & Brazers	23	27	4	3	7
Pressers, Hand	6	7	1	1	2
Sewers, Hand	7	9	2	1	3
Cutters & Trimmers, Hand	65	83	18	8	26
Portable Machine Cutters	17	21	4	2	6
Cannery Workers	68	65	0	7	7
Meat, Poultry, & Fish Cutters - Hand	59	56	0	6	6
Metal Pourers & Casters, Basic Shapes	20	21	1	2	3
Molders & Casters, Hand	139	151	12	13	25
Painting, Coating, & Decorating Workers, Hand	79	98	19	8	27
Grinding & Polishing Workers, Hand	214	268	54	25	79
Assemblers/Fabricators - Exc. Machine, Electrical & Precision	2,643	3,245	602	311	913
All Other Hand Workers	679	786	107	79	186
Stationary Engineers	32	39	7	4	11
All Other Plant & System Operators	54	60	6	6	12
Truck Drivers, Heavy or Tractor Trailer	1,301	1,421	120	96	216

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

MARICOPA COUNTY (CONTD.)

	ESTIMATED MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1983-1987	JOB OPENINGS DUE TO SEPARATIONS 1983-1987	TOTAL JOB OPENINGS 1983-1987
Truck Drivers, Light - Incl. Delivery & Route	630	704	74	47	121
Driving Sales Workers	767	805	38	53	91
All Other Motor Vehicle Operators	81	102	21	6	27
All Other Transportation & Related Workers	24	23	0	3	3
Crane & Tower Operators	103	118	15	8	23
Industrial Truck & Tractor Operators	756	840	84	56	140
Conveyor Operators & Tenders	212	235	23	24	47
Operating Engineers	44	48	4	4	8
All Other Material Moving Equipment Operators	40	41	1	3	4
Mechanic & Repairer Helpers	71	82	11	8	19
Construction & Extraction Worker Helpers	127	139	12	14	26
Machine Feeders & Offbearers	492	558	66	57	123
Freight, Stock, & Material Movers, Hand	878	1,001	123	101	224
Hand Packers & Packagers	550	624	74	63	137
Vehicle Washers & Equipment Cleaners	13	12	0	1	1
All Other Helpers & Laborers	1,730	1,939	209	197	406
TOTAL ALL OCCUPATIONS	107,581	129,373	22,187	13,298	35,485

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Other Professional, Paraprofessional, & Technical Workers
  Teachers & Instructors, Voc. Ed. & Training

All Other Health Professionals, Paraprofessionals & Technicians
  Opticians, Dispensing & Measuring

SALES & RELATED OCCUPATIONS

All Other Sales & Related Workers
  Salespersons, Retail
  News/Street Vendors, Phone Solicitors, Door-to-Door Sales Workers

AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS

All Timber Cutting & Related Workers
  First Line Supervisors - Agri., Forestry, & Rel.
  Fallers & Buckers
  Logging Tractor Operators

All Other Agri., Forestry, Fishing, & Related
  Log Graders & Scalers

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other Mechanics, Installers, & Repairers
  Refractory Matls. Repairers, Exc. Brick Masons
  Riggers
  Menders - Garments, Linens, & Related

All Other Precision Metal Workers
  Precision Instrument Makers
  Boilermakers

All Other Precision Woodworkers
  Pattern Markers, Wood
  Furniture Finishers

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING (CONTD.)

All Other Precision Workers
  Precision Photographic Process Workers
  Gem & Diamond Workers

All Other Metal & Plastic Mach. Set-Up Opers.
  Foundry Mold Assembly & Shakeout Workers
  Heating Equip. Set-Up Opers. - Metal & Plastic
  Head Sawyers

All Other Printing Press Set-Up Operators
  Printing Press Machine Setters & Set-Up Opers.

All Other Machine Setters & Set-Up Operators
  Textile Machine Setters & Set-Up Operators

All Other Machine Operators & Tenders
  Shoe Sewing Machine Operators & Tenders

All Other Precision Assemblers, Metal
  Aircraft Assemblers - Precision

All Other Plant & System Operators
  Chemical Plant & System Operators

All Other Material Moving Equipment Operators
  Grader, Dozer, & Scraper Operators

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

MOHAVE COUNTY

	ESTIMATED MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1983-1987	JOB OPENINGS DUE TO SEPARATIONS 1983-1987	TOTAL JOB OPENINGS 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	103	123	20	13	33
Marketing, Advertising, & Public Rel. Mgrs.	5	6	1	1	2
Industrial Production Managers	15	17	2	2	4
General Managers & Top Executives	43	51	8	6	14
All Other Managers & Administrators	40	49	9	4	13
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	223	269	46	25	71
Accountants & Auditors	10	11	1	2	3
All Other Financial Specialists	1	1	0	0	0
All Other Management Support Workers	8	9	1	1	2
Mechanical Engineers	13	16	3	1	4
All Other Engineers	5	6	1	1	2
Electrical/Electronic Engineering Technicians	12	15	3	1	4
Mechanical Engineering Techs.	5	6	1	0	1
All Other Engineering & Related Technicians	134	162	28	15	43
All Physical & Life Science Techs.	2	3	1	0	1
All Health Diagnosing/Treating Practitioners	1	1	0	0	0
Writers & Editors	11	13	2	2	4
Artists & Related Workers	5	6	1	1	2
All Other Professional, Paraprofessional, & Technical Workers	16	20	4	1	5
SALES & RELATED OCCUPATIONS	30	35	5	4	9
All Sales Representatives & Salespersons, Service	2	2	0	0	0
Other Sales Representatives, Exc. Retail	17	20	3	3	6
All Other Sales & Related Workers	11	13	2	1	3
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	242	289	47	41	88
Secretaries	20	24	4	5	9
Stenographers	8	10	2	2	4
Bookkeeping, Accounting, & Auditing Clerks	32	37	5	6	11
General Office Clerks	29	35	6	6	12
Data Entry Keyers, Exc. Composing	12	15	3	1	4
Data Keyers, Composing	5	5	0	1	1
All Other Communication Equipment Operators	4	5	1	1	2
Production, Planning, & Expediting Clerks	18	22	4	4	8
Stock Clerks - Stockroom, Warehouse, or Yard	40	49	9	5	14
Traffic, Shipping, & Receiving Clerks	30	34	4	3	7
All Other Material Recording/Scheduling/Dist.	13	16	3	2	5
All Other Clerical & Administrative Support	31	37	6	5	11
SERVICE OCCUPATIONS	40	47	7	4	11
All Service Supervisors & Managers	3	4	1	1	2
Guards & Watch Guards	26	31	5	2	7
All Food Service Workers	2	2	0	0	0
Janitors & Cleaners, Exc. Maids & Housekeeping	9	10	1	1	2
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	1,419	1,672	256	166	422
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	8	9	1	1	2
First Line Mgrs./Supers. - Production & Opers.	56	67	11	4	15
First Line Mgrs./Supers. - Transport. Operatives	6	7	1	1	2
First Line Mgrs./Supers. - Laborers & Helpers	10	11	1	2	3
Precision Inspectors, Testers, & Graders	10	12	2	1	3
Production Inspectors, Testers, & Graders	48	56	8	6	14
Machinery Maintenance Mechanics	19	23	4	2	6
Machinery Maintenance Workers	14	13	0	2	2
Maintenance Repairers, General Utility	16	19	3	2	5
Automotive Mechanics	38	46	8	3	11
All Other Mechanics, Installers, & Repairers	19	23	4	1	5
All Construction Trades Workers	16	19	3	1	4

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

MOHAVE COUNTY (CONTD.)

	ESTIMATED MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1983-1987	JOB OPENINGS DUE TO SEPARATIONS 1983-1987	TOTAL JOB OPENINGS 1983-1987
Tool & Die Makers	15	19	4	2	6
All Other Precision Metal Workers	13	16	3	1	4
All Precision Woodworkers	14	16	2	2	4
All Precision Printing Workers	11	14	3	1	4
Precision Foundry Mold & Core Makers	8	10	2	1	3
All Other Precision Workers	12	15	3	0	3
Extruding/Drawing Machine Set-Up Operators - Metal & Plastic	34	33	0	4	4
Rolling Mach. Set-Up Opers. - Metal & Plastic	14	13	0	2	2
Combination Machine Tool Set-Up Operators - Metal & Plastic	28	35	7	3	10
Combination Machine Tool Operators - Metal & Plastic	87	110	23	12	35
Soldering & Brazing Machine Opers. & Tenders	6	8	2	1	3
Plastic Molding & Casting Machine Set-Up Opers.	50	57	7	5	12
Metal Molding, Coremaking, & Casting Mach. Opers.	20	25	5	3	8
Nonelectrolytic Coating Machine Set-Up - Metal & Plastic	7	9	2	0	2
Heat Treating/Tempering Machine Operators - Metal & Plastic	6	8	2	1	3
All Other Metal & Plastic Mach. Set-Up Opers.	29	36	7	3	10
All Other Metal & Plastic Machine Operators	4	5	1	0	1
Photoengraving & Lithographing Photographers	8	10	2	0	2
All Other Printing Setters & Set-Up Opers.	9	11	2	1	3
Typesetting & Composing Mach. Opers. & Tenders	7	9	2	2	4
Printing Press Machine Operators & Tenders	11	13	2	1	3
Textile Bleaching & Dyeing Machine Operators	7	8	1	1	2
Sewing Machine Operators, Non-Garment	140	154	14	19	33
Coating & Painting Machine Set-Up Operators	6	6	0	1	1
Coating, Painting, & Spraying Machine Opers.	8	10	2	1	3
Cleaning, Washing, & Pickling Equipment Opers.	5	6	1	1	2
Packaging & Filling Machine Opers. & Tenders	76	91	15	9	24
All Other Machine Setters & Set-Up Operators	2	2	0	0	0
All Other Machine Operators & Tenders	90	100	10	12	22
All Precision Assemblers, Metal	36	44	8	7	15
Electrical & Electronic Assemblers	7	9	2	1	3
Coil Winders, Tapers, & Finishers	7	9	2	1	3
Welders & Cutters	19	24	5	2	7
Portable Machine Cutters	13	14	1	2	3
Assemblers/Fabricators - Exc. Machine, Electrical & Precision	181	228	47	21	68
All Other Hand Workers	46	54	8	5	13
Truck Drivers, Heavy or Tractor Trailer	26	30	4	2	6
Truck Drivers, Light - Incl. Delivery & Route	16	19	3	1	4
Industrial Truck & Tractor Operators	11	11	0	1	1
All Other Material Moving Equipment Operators	2	2	0	0	0
Freight, Stock, & Material Movers, Hand	11	11	0	1	1
Hand Packers & Packagers	17	19	2	2	4
All Other Helpers & Laborers	40	44	4	5	9
TOTAL ALL OCCUPATIONS	2,057	2,435	381	253	634

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Other Professional, Paraprofessional, & Technical Workers
Reporters & Correspondents

SALES & RELATED OCCUPATIONS

All Other Sales & Related Workers
Sales Representatives, Scientific & Related Products & Services, Exc. Retail

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Other Clerical & Administrative Support
Order Clerks - Materials, Merch., & Service
Mail Clerks, Exc. Mail Machine Operators & Postal Service

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Construction Trades Workers
Concrete & Terrazzo Finishers

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

MOHAVE COUNTY (CONTD.)

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING (CONTD.)

- All Other Precision Metal Workers
  - Sheet Metal Workers

- All Precision Woodworkers
  - Pattern & Model Makers, Wood (Exc. Carpenters)

- All Other Metal & Plastic Mach. Set-Up Opers.
  - Punching Machine Set-Up Operators - Metal & Plastic

- All Other Printing Setters & Set-Up Opers.
  - Offset Litho. Press Setters & Set-Up Opers.

- All Other Machine Operators & Tenders
  - Sewing Machine Operators, Garment
  - Cutting & Slicing Machine Operators & Tenders
  - Crushing, Grinding, & Mixing Machine Operators

- All Precision Assemblers, Metal
  - Electrical/Electronic Equipment Assemblers - Precision

- All Other Hand Workers
  - Pressers, Hand
  - Molders & Casters, Hand
  - Painting, Coating, & Decorating Workers, Hand

- All Other Helpers & Laborers
  - Machine Feeders & Offbearers

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

NAVAJO COUNTY

	ESTIMATED MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1983-1987	JOB OPENINGS DUE TO SEPARATIONS 1983-1987	TOTAL JOB OPENINGS 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	51	58	7	6	13
General Managers & Top Executives	29	34	5	4	9
All Other Managers & Administrators	22	24	2	2	4
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	40	45	5	1	6
Accountants & Auditors	7	8	1	1	2
All Engineers	13	15	2	0	2
All Engineering & Related Technicians	5	5	0	0	0
All Life Scientists	1	1	0	0	0
All Physical & Life Science Techs.	3	3	0	0	0
All Other Professional, Paraprofessional, & Technical Workers	11	13	2	0	2
SALES & RELATED OCCUPATIONS	36	44	8	5	13
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	98	112	14	18	32
Secretaries	17	20	3	4	7
Bookkeeping, Accounting, & Auditing Clerks	21	24	3	4	7
General Office Clerks	17	20	3	4	7
All Office Machine Operators	3	3	0	1	1
All Communication Equipment Operators	1	1	0	0	0
All Material Recording/Scheduling/Dist.	17	19	2	2	4
All Other Clerical & Administrative Support	22	25	3	3	6
SERVICE OCCUPATIONS	14	16	2	2	4
All Protective Service Workers	3	3	0	0	0
Janitors & Cleaners, Exc. Maids & Housekeeping	11	13	2	2	4
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	161	178	17	18	35
First Line Supervisors - Agri., Forestry, & Rel.	10	11	1	1	2
Fallers & Buckers	68	75	7	8	15
Log Handling Equipment Operators	25	28	3	3	6
Logging Tractor Operators	19	21	2	2	4
All Other Timber Cutting & Related Workers	38	42	4	4	8
All Other Agri., Forestry, Fishing, & Related	1	1	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	830	951	121	81	202
First Line Mgrs./Supers. - Production & Opers.	43	49	6	3	9
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	34	40	6	5	11
Production Inspectors, Testers, & Graders	25	29	4	3	7
All Machinery Maintenance Mechanics	17	20	3	1	4
Maintenance Repairers, General Utility	23	26	3	2	5
Automotive Mechanics	17	20	3	1	4
All Other Mechanics, Installers, & Repairers	108	124	16	10	26
Electricians	11	13	2	1	3
All Construction Trades Workers	9	10	1	1	2
All Precision Metal Workers	17	20	3	2	5
All Precision Printing Workers	4	5	1	0	1
All Precision Food & Tobacco Workers	5	6	1	0	1
All Other Precision Workers	29	32	3	3	6
Sawing Machine Operators & Tenders	45	50	5	5	10
All Printing & Related Machine Opers.	5	6	1	0	1
Crushing, Grinding, & Mixing Machine Operators	71	82	11	8	19
All Machine Setters & Set-Up Operators	63	72	9	7	16
All Other Machine Operators & Tenders	23	26	3	3	6
All Hand Workers	5	5	0	0	0
Truck Drivers, Heavy or Tractor Trailer	50	57	7	4	11
All Other Motor Vehicle Operators	24	30	6	1	7
Industrial Truck & Tractor Operators	31	36	5	2	7
All Other Material Moving Equipment Operators	7	8	1	0	1
Machine Feeders & Offbearers	48	53	5	5	10
Freight, Stock, & Material Movers, Hand	31	35	4	4	8
All Other Helpers & Laborers	85	97	12	10	22
TOTAL ALL OCCUPATIONS	1,230	1,404	174	131	305

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

NAVAJO COUNTY (CONTD.)

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Other Professional, Paraprofessional, & Technical Workers
- Reporters & Correspondents

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Material Recording/Scheduling/Dist.
- Stock Clerks - Stockroom, Warehouse, or Yard

All Other Clerical & Administrative Support
- Typists

AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS

All Other Timber Cutting & Related Workers
- Choke Setters

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other First Line Managers/Supervisors - Maintenance/Production/Construction
- First Line Managers/Supervisors - Mechanics/Installers/Repairers
- First Line Mgrs./Supers. - Laborers & Helpers

All Machinery Maintenance Mechanics
- Machinery Maintenance Mechanics, Water & Power Generation Plants

All Other Mechanics, Installers, & Repairers
- Machinery Maintenance Workers
- Precision Instrument Repairers
- Coin & Vending Machine Servicers & Repairers

All Construction Trades Workers
- Plumbers, Pipefitters, & Steamfitters

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING (CONTD.)

All Precision Metal Workers
- Precision Hand Workers, Jewelry & Related

All Machine Setters & Set-Up Operators
- Chemical Equipment Controllers & Operators
- Chemical Equipment Tenders
- Packaging & Filling Machine Opers. & Tenders

All Other Machine Operators & Tenders
- Woodworking Mach. Opers. & Tenders, Exc. Sawing

All Other Motor Vehicle Operators
- Driving Sales Workers

All Other Helpers & Laborers
- Mechanic & Repairer Helpers
- Hand Packers & Packagers

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

PIMA COUNTY

	ESTIMATED MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1983-1987	JOB OPENINGS DUE TO SEPARATIONS 1983-1987	TOTAL JOB OPENINGS 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	2,314	2,853	539	319	858
Financial Managers	97	122	25	12	37
Personnel, Training, & Labor Relations Mgrs.	47	58	11	6	17
Purchasing Managers	86	109	23	9	32
Marketing, Advertising, & Public Rel. Mgrs.	53	69	16	8	24
Administrative Services Managers	102	133	31	13	44
Industrial Production Managers	187	242	55	24	79
General Managers & Top Executives	556	670	114	72	186
All Other Managers & Administrators	1,186	1,450	264	175	439
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	6,581	8,158	1,577	519	2,096
Accountants & Auditors	119	151	32	18	50
Budget Analysts	6	8	2	1	3
All Other Financial Specialists	18	24	6	2	8
Purchasing Agents, Exc. Wholesale, Retail, & Farm	161	203	42	22	64
Personnel, Training, & Labor Rel. Specialists	106	131	25	13	38
Cost Estimators	14	16	2	3	5
All Other Management Support Workers	255	315	60	37	97
Metallurgical & Materials Engineers	7	10	3	0	3
Chemical Engineers	26	34	8	2	10
Electrical & Electronic Engineers	1,605	2,008	403	99	502
Industrial Engineers, Exc. Safety	395	520	125	32	157
Safety Engineers, Exc. Mining	7	9	2	1	3
Mechanical Engineers	805	966	161	51	212
All Other Engineers	196	253	57	15	72
Electrical/Electronic Engineering Technicians	453	593	140	27	167
Industrial Engineering Techs.	89	117	28	10	38
Mechanical Engineering Techs.	62	81	19	2	21
Drafters	173	222	49	15	64
All Other Engineering & Related Technicians	183	228	45	20	65
Chemists, Exc. Biochemists	20	25	5	2	7
All Other Physical Scientists	7	9	2	1	3
Chemical Techs., Exc. Health	19	22	3	2	5
Systems Analysts, Electronic Data Processing	208	261	53	9	62
Computer Programmers	378	441	63	20	83
Computer Programmer Aides	22	28	6	2	8
Programmers - Numerical, Tool, & Process	157	178	21	10	31
Operations & Systems Analysts, Exc. Computer	311	371	60	9	69
Statisticians	23	26	3	3	6
Mathematical Technicians	40	53	13	1	14
Health Practitioners, Technicians, & Related	4	5	1	1	2
Writers & Editors	112	136	24	20	44
Technical Writers	20	27	7	1	8
Reporters & Correspondents	125	151	26	23	49
Artists & Related Workers	23	28	5	4	9
Designers, Exc. Interior Designers	78	95	17	7	24
All Other Professional, Paraprofessional, & Technical Workers	354	413	59	34	93
SALES & RELATED OCCUPATIONS	783	909	127	121	248
First Line Supervisors & Managers - Sales	59	72	13	9	22
All Sales Representatives & Salespersons, Service	34	41	7	5	12
Sales Engineers	41	53	12	2	14
Sales Representatives, Scientific & Related Products & Services, Exc. Retail	71	90	19	10	29
All Other Sales Representatives, Exc. Retail	383	435	52	63	115
Cashiers	36	35	0	7	7
All Other Sales & Related Workers	159	183	24	25	49
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	4,310	5,212	902	848	1,750
First Line Supers.-Clerical & Admin. Support	81	96	15	11	26
Proofreaders & Copy Markers	12	14	2	1	3
Secretaries	546	670	124	130	254

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

PIMA COUNTY (CONTD.)

	ESTIMATED MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1983-1987	JOB OPENINGS DUE TO SEPARATIONS 1983-1987	TOTAL JOB OPENINGS 1983-1987
Stenographers	13	19	6	3	9
Receptionists & Information Clerks	23	28	5	5	10
Typists	48	61	13	13	26
Typists, Word Processing Equipment	60	78	18	7	25
Personnel Clerks, Exc. Payroll & Timekeeping	22	29	7	6	13
File Clerks	17	21	4	5	9
Order Clerks - Materials, Merch., & Service	67	83	16	15	31
Procurement Clerks	53	70	17	6	23
Statistical Clerks	11	15	4	3	7
Bookkeeping, Accounting, & Auditing Clerks	251	305	54	51	105
Payroll & Timekeeping Clerks	31	36	5	6	11
Billing, Cost & Rate Clerks	43	57	14	10	24
General Office Clerks	811	964	153	179	332
Duplicating Machine Operators	12	14	2	2	4
Mail Machine Operators, Preparation & Handling	5	6	1	1	2
Computer Operators, Exc. Peripheral Equipment	191	233	42	21	63
Data Entry Keyers, Exc. Composing	88	115	27	7	34
Data Keyers, Composing	17	21	4	5	9
All Other Office Machine Operators	35	41	6	10	16
Switchboard Operators	20	25	5	6	11
Mail Clerks, Exc. Mail Machine Operators & Postal Service	11	13	2	2	4
Dispatchers - Exc. Police, Fire, & Ambulance	29	35	6	3	9
Production, Planning, & Expediting Clerks	380	474	94	85	179
Measurers & Samplers - Recordkeeping	15	16	1	2	3
Stock Clerks - Stockroom, Warehouse, or Yard	296	350	54	34	88
Traffic, Shipping, & Receiving Clerks	221	270	49	26	75
All Other Material Recording/Scheduling/Dist.	22	28	6	3	9
All Other Clerical & Administrative Support	879	1,025	146	190	336
SERVICE OCCUPATIONS	308	381	73	48	121
First Line Supers. & Mgrs./Supers. - Service	14	18	4	3	7
Guards & Watch Guards	84	108	24	5	29
Janitors & Cleaners, Exc. Maids & Housekeeping	177	216	39	33	72
All Other Service Workers	33	39	6	7	13
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	8	10	2	2	4
Gardeners & Groundskeepers, Exc. Farm	8	10	2	2	4
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	12,144	14,835	2,696	1,499	4,195
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	54	68	14	8	22
First Line Managers/Supervisors - Construction Trades & Extraction Workers	5	7	2	1	3
First Line Mgrs./Supers. - Production & Opers.	741	909	168	53	221
First Line Mgrs./Supers. - Transport. Operatives	86	97	11	17	28
First Line Mgrs./Supers. - Laborers & Helpers	65	76	11	13	24
Precision Inspectors, Testers, & Graders	560	716	156	68	224
Production Inspectors, Testers, & Graders	374	477	103	45	148
Machinery Maintenance Mechanics	102	122	20	10	30
All Other Machinery Maintenance Mechanics	3	3	0	0	0
Maintenance Repairers, General Utility	182	218	36	17	53
Automotive Mechanics	24	27	3	2	5
Mobile Heavy Equip. Mechanics, Exc. Engines	17	20	3	1	4
Data Processing Equipment Repairers	27	31	4	1	5
All Other Electrical Mechs./Installers/Repairers	117	154	37	7	44
Heating, Air Conditioning, & Refrigeration Mechanics & Installers	20	26	6	2	8
Precision Instrument Repairers	106	143	37	10	47
Coin & Vending Machine Servicers & Repairers	27	26	0	2	2
All Other Mechanics, Installers, & Repairers	218	284	66	15	81
Carpenters	37	45	8	5	13
Electricians	64	80	16	6	22
Painters & Paperhangers - Construction & Maintenance	23	31	8	3	11

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

PIMA COUNTY (CONTD.)

	ESTIMATED MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1983-1987	JOB OPENINGS DUE TO SEPARATIONS 1983-1987	TOTAL JOB OPENINGS 1983-1987
Plumbers, Pipefitters, & Steamfitters	19	25	6	2	8
All Other Construction Trades Workers	5	6	1	0	1
All Extraction Workers, Exc. Helpers	9	11	2	1	3
Tool & Die Makers	80	100	20	13	33
Machinists	271	323	52	29	81
Tool Grinders, Filers, Sharpeners (Precision)	28	33	5	3	8
Precision Layout Workers, Metal	15	19	4	1	5
Sheet Metal Workers	104	124	20	7	27
All Other Precision Metal Workers	20	28	8	3	11
Wood Machinists	83	109	26	10	36
Cabinetmakers & Bench Carpenters	97	109	12	8	20
All Other Precision Woodworkers	47	59	12	6	18
Shoe & Leather Workers & Repairers - Precision	12	13	1	2	3
All Other Precision Textile & Apparel Workers	9	10	1	2	3
Precision Compositors/Typesetters/Arrangers	34	41	7	5	12
Job Printers	52	63	11	8	19
Precision Lithography & Photoengraving Workers	50	60	10	3	13
All Other Precision Printing Workers	3	4	1	1	2
Slaughterers & Butchers	21	20	0	2	2
Food Batchmakers	36	35	0	4	4
All Other Precision Food & Tobacco Workers	14	14	0	2	2
Precision Molders/Casters, Exc. Jewely & Foundry	58	73	15	7	22
Precision Detail Design Decorators & Painters	40	56	16	4	20
All Other Precision Workers	103	132	29	11	40
Sawing Machine Tool Set-Up Operators - Metal & Plastic	34	43	9	4	13
Lathe/Turning Machine Set-Up Operators - Metal & Plastic	22	25	3	3	6
Drilling/Boring Machine Set-Up Operators - Metal & Plastic	9	10	1	1	2
Milling/Planing Machine Set-Up Operators - Metal & Plastic	19	22	3	3	6
Grinding & Buffing Machine Set-Up Operators - Metal & Plastic	58	67	9	5	14
Machine Tool Cutting Operators & Tenders - Metal & Plastic	26	34	8	2	10
Press/Press Brake Machine Set-Up Operators - Metal & Plastic	7	9	2	1	3
Machine Forming Operators & Tenders - Metal & Plastic	94	106	12	11	23
Numerical Control Machine Tool Operators - Metal & Plastic	53	61	8	7	15
Combination Machine Tool Set-Up Operators - Metal & Plastic	93	121	28	9	37
Combination Machine Tool Operators - Metal & Plastic	105	127	22	14	36
Welding Machine Setters & Set-Up Operators	36	41	5	3	8
Metal Fabricators, Structural Metal Products	25	28	3	2	5
Plastic Molding & Casting Machine Set-Up Opers.	11	15	4	1	5
Plastic Molding & Casting Mach. Opers. & Tenders	103	115	12	14	26
Electrolytic Coating Machine Set-Up Operators - Metal & Plastic	28	34	6	3	9
Electrolytic Coating Machine Operators - Metal & Plastic	19	21	2	2	4
All Other Metal & Plastic Mach. Set-Up Opers.	17	21	4	1	5
All Other Metal & Plastic Machine Operators	35	43	8	3	11
Sawing Machine Operators & Tenders	13	16	3	2	5
Offset Litho. Press Setters & Set-Up Opers.	64	77	13	10	23
Letter Press Setters & Set-Up Operators	20	24	4	2	6
Photoengraving & Lithographing Photographers	21	25	4	1	5
Bindery Machine Setters & Set-Up Operators	8	10	2	1	3
Typesetting & Composing Mach. Opers. & Tenders	55	66	11	15	26
Printing Press Machine Operators & Tenders	98	118	20	11	31
Bindery Machine Operators	41	50	9	5	14

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

PIMA COUNTY (CONTD.)

	ESTIMATED MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1983-1987	JOB OPENINGS DUE TO SEPARATIONS 1983-1987	TOTAL JOB OPENINGS 1983-1987
All Other Printing & Related Machine Opers.	15	18	3	2	5
Sewing Machine Operators, Garment	168	187	19	23	42
Sewing Machine Operators, Non-Garment	35	41	6	5	11
Cooking Machine Operators & Tenders, Food	10	10	0	1	1
Roasting, Baking, & Drying Mach. Opers., Food	18	17	0	2	2
Furnace, Kiln, Oven, Drier, or Kettle Opers.	22	26	4	3	7
Cutting & Slicing Machine Operators & Tenders	38	42	4	4	8
Coating & Painting Machine Set-Up Operators	11	13	2	1	3
Coating, Painting, & Spraying Machine Opers.	23	26	3	3	6
Cementing & Gluing Machine Operators & Tenders	10	11	1	1	2
Crushing, Grinding, & Mixing Machine Operators	86	94	8	10	18
Extruding/Forming/Pressing Mach. Set-Up Opers.	59	68	9	7	16
Extruding, Forming, & Pressing Machine Opers.	77	86	9	9	18
Packaging & Filling Machine Opers. & Tenders	185	192	7	21	28
All Other Machine Setters & Set-Up Operators	34	42	8	5	13
All Other Machine Operators & Tenders	181	212	31	22	53
Machine Builders & Assemblers	30	37	7	3	10
Electromech. Equip. Assemblers - Precision	1,128	1,381	253	219	472
Electrical/Electronic Equipment Assemblers - Precision	613	830	217	123	340
All Other Precision Assemblers, Metal	280	368	88	55	143
Machine Assemblers	73	99	26	9	35
Electrical & Electronic Assemblers	990	1,259	269	118	387
Welders & Cutters	130	152	22	12	34
Cutters & Trimmers, Hand	16	18	2	2	4
Meat, Poultry, & Fish Cutters - Hand	18	17	0	2	2
Molders & Casters, Hand	19	22	3	2	5
Grinding & Polishing Workers, Hand	16	18	2	2	4
Assemblers/Fabricators - Exc. Machine, Electrical & Precision	720	926	206	86	292
All Other Hand Workers	258	312	54	28	82
All Plant & System Operators	13	15	2	1	3
Truck Drivers, Heavy or Tractor Trailer	197	229	32	15	47
Truck Drivers, Light - Incl. Delivery & Route	349	391	42	26	68
Driving Sales Workers	61	62	1	4	5
All Other Motor Vehicle Operators	6	7	1	0	1
Crane & Tower Operators	10	12	2	1	3
Industrial Truck & Tractor Operators	122	135	13	9	22
Operating Engineers	50	59	9	5	14
All Other Material Moving Equipment Operators	6	7	1	0	1
Mechanic & Repairer Helpers	53	68	15	6	21
Construction & Extraction Worker Helpers	11	13	2	1	3
Machine Feeders & Offbearers	142	176	34	17	51
Freight, Stock, & Material Movers, Hand	105	127	22	12	34
Hand Packers & Packagers	319	363	44	36	80
All Other Helpers & Laborers	261	291	30	30	60
TOTAL ALL OCCUPATIONS	26,448	32,358	5,916	3,356	9,272

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Other Professional, Paraprofessional, & Technical Workers
- Librarians, Professional
- Photographers

All Other Engineers
- Aeronautical and Astronautical Engineers

SALES & RELATED OCCUPATIONS

All Sales Representatives & Salespersons, Service
- Sales Agents, Advertising

All Other Sales & Related Workers
- Salespersons, Retail
- News/Street Vendors, Phone Solicitors, Door-to-Door Sales Workers

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Other Office Machine Operators
- Peripheral EDP Equipment Operators

All Other Clerical & Administrative Support
- Advertising Clerks

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other Electrical Mechs./Installers/Repairers
- Electronics Repairers, Commercial & Ind. Equip.
- Electrical Installers & Repairers, Transportation Equipment

All Other Mechanics, Installers, & Repairers
- Bus & Truck Mechs., & Diesel Eng. Specialists
- Aircraft Mechanics
- Aircraft Engine Specialists
- Mechanical Control & Valve Installers & Repairers

All Other Extraction Workers, Exc. Helpers
- Extraction & Related Workers - Incl. Blasters

All Other Precision Metal Workers
- Jewelers & Silversmiths
- Precision Hand Workers, Jewelry & Related

All Other Precision Woodworkers
- Precision Woodworkers
- Pattern & Model Makers, Wood (Exc. Carpenters)

All Other Precision Textile & Apparel Workers
- Fabric & Apparel Layout & Patternmakers

All Other Precision Food & Tobacco Workers
- Bakers, Manufacturing

All Other Precision Workers
- Precision Foundry Mold & Core Makers
- Precision Optical Goods Workers

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING (CONTD.)

All Other Metal & Plastic Mach. Set-Up Opers.
- Punching Machine Set-Up Operators - Metal & Plastic

All Other Metal & Plastic Machine Operators
- Soldering & Brazing Machine Opers. & Tenders
- Nonelectrolytic Coating Machine Operators - Metal & Plastic
- Furnace Operators & Tenders

All Other Machine Setters & Set-Up Operators
- Woodworking Machine Set-Up Opers., Exc. Sawing
- Cutting & Slicing Mach. Setters & Set-Up Opers.

All Other Machine Operators & Tenders
- Woodworking Mach. Opers. & Tenders, Exc. Sawing
- Shoe Sewing Machine Operators & Tenders
- Pressing Machine Opers. - Textile & Garments
- Paper Goods Machine Setters & Set-Up Operators
- Dairy Processing Equip. Opers., Incl. Setters
- Chemical Equipment Controllers & Operators
- Painters, Transportation Equipment
- Cleaning, Washing, & Pickling Equipment Opers.

All Other Precision Assemblers, Metal
- Aircraft Assemblers - Precision

All Other Hand Workers
- Coil Winders, Tapers, & Finishers
- Glaziers, Manufacturing
- Solderers & Brazers
- Cannery Workers
- Painting, Coating, & Decorating, Hand

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

PINAL COUNTY

	ESTIMATED MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1983-1987	JOB OPENINGS DUE TO SEPARATIONS 1983-1987	TOTAL JOB OPENINGS 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	85	99	14	8	22
Industrial Production Managers	12	14	2	1	3
General Managers & Top Executives	57	68	11	7	18
All Other Managers & Administrators	16	17	1	0	1
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	74	79	5	4	9
All Financial Specialists	3	3	0	0	0
Purchasing Agents, Exc. Wholesale, Retail, & Farm	5	5	0	1	1
All Other Management Support Workers	6	6	0	0	0
All Engineers	19	21	2	0	2
All Engineering & Related Technicians	10	10	0	0	0
All Physical Scientists	7	7	0	0	0
All Physical & Life Science Techs.	5	5	0	0	0
Writers & Editors	6	7	1	1	2
All Other Professional, Paraprofessional, & Technical Workers	13	15	2	2	4
SALES & RELATED OCCUPATIONS	39	46	7	6	13
First Line Supervisors & Managers - Sales	10	11	1	1	2
Sales Representatives, Scientific & Related Products & Services, Exc. Retail	5	6	1	1	2
Other Sales Representatives, Exc. Retail	23	28	5	4	9
All Other Sales & Related Workers	1	1	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	191	219	28	32	60
First Line Supers.-Clerical & Admin. Support	5	5	0	1	1
Secretaries	23	27	4	5	9
Bookkeeping, Accounting, & Auditing Clerks	24	28	4	5	9
Payroll & Timekeeping Clerks	5	5	0	1	1
General Office Clerks	33	39	6	7	13
All Office Machine Operators	6	7	1	1	2
Production, Planning, & Expediting Clerks	6	6	0	1	1
Measurers & Samplers - Recordkeeping	20	24	4	2	6
Stock Clerks - Stockroom, Warehouse, or Yard	17	19	2	2	4
Traffic, Shipping, & Receiving Clerks	29	34	5	3	8
All Other Material Recording/Scheduling/Dist.	4	4	0	0	0
All Other Clerical & Administrative Support	19	21	2	4	6
SERVICE OCCUPATIONS	24	28	4	4	8
All Protective Service Workers	4	5	1	0	1
All Food Service Workers	3	3	0	1	1
Janitors & Cleaners, Exc. Maids & Housekeeping	17	20	3	3	6
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	1,849	2,054	210	200	410
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	8	9	1	1	2
First Line Mgrs./Supers. - Production & Opers.	113	126	13	8	21
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	11	11	0	2	2
Precision Inspectors, Testers, & Graders	9	10	1	1	2
Production Inspectors, Testers, & Graders	35	41	6	4	10
Machinery Maintenance Mechanics	15	16	1	1	2
Machinery Maintenance Mechanics, Water & Power Generation Plants	4	4	0	0	0
Maintenance Repairers, General Utility	43	52	9	4	13
All Other Mechanics, Installers, & Repairers	30	32	2	2	4
Carpenters	15	16	1	2	3
Electricians	33	33	0	3	3
All Other Construction Trades Workers	41	43	2	3	5
All Extraction Workers, Exc. Helpers	52	50	0	4	4
Machinists	26	28	2	3	5
Tool Grinders, Filers, Sharpeners (Precision)	6	7	1	1	2

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

PINAL COUNTY (CONTD.)

	ESTIMATED MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1983-1987	JOB OPENINGS DUE TO SEPARATIONS 1983-1987	TOTAL JOB OPENINGS 1983-1987
All Other Precision Metal Workers	12	15	3	2	5
Cabinetmakers & Bench Carpenters	7	8	1	1	2
All Other Precision Woodworkers	14	16	2	1	3
All Precision Textile & Apparel Workers	4	5	1	0	1
All Precision Printing Workers	5	6	1	0	1
All Precision Food & Tobacco Workers	8	9	1	1	2
Grinding & Buffing Machine Set-Up Operators - Metal & Plastic	8	11	3	1	4
Punching Machine Set-Up Operators - Metal & Plastic	27	32	5	4	9
Press/Press Brake Machine Set-Up Operators - Metal & Plastic	27	32	5	3	8
Welding Machine Operators & Tenders	25	34	9	3	12
All Other Metal & Plastic Mach. Set-Up Opers.	9	12	3	0	3
All Other Metal & Plastic Machine Operators	144	167	23	19	42
All Other Printing Setters & Set-Up Opers.	6	7	1	0	1
Printing Press Machine Operators & Tenders	6	7	1	1	2
All Other Printing & Related Machine Opers.	5	6	1	1	2
Sewing Machine Operators, Garment	284	313	29	38	67
Coating, Painting, & Spraying Machine Opers.	12	16	4	1	5
Crushing, Grinding, & Mixing Machine Operators	30	36	6	4	10
Extruding, Forming, & Pressing Machine Opers.	20	24	4	2	6
Packaging & Filling Machine Opers. & Tenders	39	48	9	5	14
All Other Machine Operators & Tenders	107	112	5	13	18
All Precision Assemblers, Metal	11	13	2	2	4
Welders & Cutters	18	21	3	2	5
Cutters & Trimmers, Hand	6	7	1	1	2
Assemblers/Fabricators - Exc. Machine, Electrical & Precision	17	21	4	2	6
All Other Hand Workers	55	63	8	5	13
All Plant & System Operators	20	22	2	3	5
Truck Drivers, Heavy or Tractor Trailer	71	83	12	5	17
Truck Drivers, Light - Incl. Delivery & Route	6	7	1	0	1
All Other Motor Vehicle Operators	3	4	1	0	1
Crane & Tower Operators	25	24	0	2	2
Industrial Truck & Tractor Operators	18	21	3	1	4
All Other Material Moving Equipment Operators	80	79	0	6	6
Construction & Extraction Worker Helpers	14	16	2	2	4
Freight, Stock, & Material Movers, Hand	63	71	8	7	15
All Other Freight & Material Movers, Hand	62	61	0	7	7
Hand Packers & Packagers	15	19	4	2	6
All Other Helpers & Laborers	125	128	3	14	17
TOTAL ALL OCCUPATIONS	2,262	2,525	268	254	522

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Engineers
 Metallurgical & Materials Engineers
 Mechanical Engineers

All Other Professional, Paraprofessional, & Technical Workers
 Reporters & Correspondents

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other First Line Managers/Supervisors - Maintenance/Production/Construction
 First Line Mgrs./Supers. - Laborers & Helpers

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING (CONTD.)

All Other Mechanics, Installers, & Repairers
 Refractory Matls. Repairers, Exc. Brick Masons
 Bus & Truck Mechs., & Diesel Eng. Specialists

All Other Construction Trades Workers
 Plumbers, Pipefitters, & Steamfitters

All Extraction Workers, Exc. Helpers
 Extraction & Related Workers - Incl. Blasters

All Other Precision Metal Workers
 Sheet Metal Workers

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

PINAL COUNTY (CONTD.)

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

- All Other Precision Woodworkers
  - Furniture Finishers

- All Precision Food & Tobacco Workers
  - Slaughterers & Butchers

- All Other Metal & Plastic Machine Operators
  - Machine Tool Cutting Operators & Tenders - Metal & Plastic
  - Plastic Molding & Casting Mach. Opers. & Tenders

- All Other Machine Operators & Tenders
  - Sewing Machine Operators, Non-Garment
  - Pressing Machine Opers. - Textile & Garments
  - Boiler Operators & Tenders, Low Pressure
  - Cutting & Slicing Machine Operators & Tenders
  - Separating & Filtering Machine Operators

- All Precision Assemblers, Metal
  - Electrical/Electronic Equipment Assemblers - Precision

- All Other Hand Workers
  - Coil Winders, Tapers, & Finishers

- All Plant & System Operators
  - Stationary Engineers

- All Other Material Moving Equipment Operators
  - Grader, Dozer, & Scraper Operators
  - Conveyor Operators & Tenders

- All Other Freight & Material Movers, Hand
  - Machine Feeders & Offbearers

- All Other Helpers & Laborers
  - Mechanic & Repairer Helpers

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

SANTA CRUZ COUNTY

	ESTIMATED MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1983-1987	JOB OPENINGS DUE TO SEPARATIONS 1983-1987	TOTAL JOB OPENINGS 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	62	75	13	9	22
Industrial Production Managers	6	7	1	1	2
General Managers & Top Executives	28	34	6	4	10
All Other Managers & Administrators	28	34	6	4	10
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	63	73	10	3	13
Accountants & Auditors	9	11	2	1	3
Purchasing Agents, Exc. Wholesale, Retail, & Farm	9	11	2	1	3
All Other Management Support Workers	3	3	0	0	0
All Engineers	19	23	4	0	4
Electrical/Electronic Engineering Technicians	11	13	2	1	3
All Other Engineering & Related Technicians	3	3	0	0	0
All Other Professional, Paraprofessional, & Technical Workers	9	9	0	0	0
SALES & RELATED OCCUPATIONS	5	5	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	117	140	23	20	43
Secretaries	17	21	4	4	8
Order Clerks - Materials, Merch., & Service	9	11	2	2	4
Bookkeeping, Accounting, & Auditing Clerks	14	17	3	3	6
General Office Clerks	7	8	1	2	3
All Office Machine Operators	5	6	1	0	1
All Communication Equipment Operators	1	1	0	0	0
Stock Clerks - Stockroom, Warehouse, or Yard	15	18	3	2	5
Traffic, Shipping, & Receiving Clerks	25	30	5	3	8
All Other Material Recording/Scheduling/Dist.	6	7	1	1	2
All Other Clerical & Administrative Support	18	21	3	3	6
SERVICE OCCUPATIONS	9	11	2	2	4
Janitors & Cleaners, Exc. Maids & Housekeeping	9	11	2	2	4
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	445	519	74	49	123
First Line Mgrs./Supers. - Production & Opers.	44	51	7	3	10
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	3	4	1	0	1
Precision Inspectors, Testers, & Graders	9	11	2	1	3
Production Inspectors, Testers, & Graders	15	17	2	2	4
All Machinery Maintenance Mechanics	2	2	0	0	0
All Other Mechanics, Installers, & Repairers	4	5	1	0	1
Tool & Die Makers	12	15	3	2	5
All Other Precision Metal Workers	4	4	0	0	0
All Precision Printing Workers	2	2	0	0	0
All Metal & Plastic Mach. Set-Up Opers.	5	6	1	0	1
All Metal & Plastic Machine Operators	17	20	3	2	5
All Printing & Related Machine Opers.	6	7	1	1	2
Sewing Machine Operators, Garment	90	99	9	12	21
Pressing Machine Opers. - Textile & Garments	12	13	1	2	3
All Other Machine Operators & Tenders	32	38	6	4	10
All Precision Assemblers, Metal	6	7	1	1	2
Grinding & Polishing Workers, Hand	13	16	3	2	5
Assemblers/Fabricators - Exc. Machine, Electrical & Precision	105	127	22	12	34
All Other Hand Workers	19	22	3	1	4
All Motor Vehicle Operators	12	14	2	0	2
Industrial Truck & Tractor Operators	8	10	2	1	3
All Other Freight & Material Movers, Hand	7	8	1	1	2
All Helpers & Laborers	18	21	3	2	5
TOTAL ALL OCCUPATIONS	701	823	122	83	205

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

SANTA CRUZ COUNTY

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

MANAGERIAL & ADMINISTRATIVE OCCUPATIONS

- All Other Managers & Administrators
  - Financial Managers

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

- All Engineers
  - Electrical & Electronic Engineers
  - Mechanical Engineers

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

- All Other Material Recording/Scheduling/Dist.
  - Production, Planning, & Expediting Clerks
- All Other Clerical & Administrative Support
  - Typists

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

- All Metal & Plastic Machine Operators
  - Machine Forming Operators & Tenders - Metal & Plastic
  - Electrolytic Coating Mach. Opers. - Metal & Plastic
- All Precision Assemblers, Metal
  - Electrical/Electronic Equipment Assemblers - Precision
- All Other Hand Workers
  - Cannery Workers
- All Motor Vehicle Operators
  - Truck Drivers, Heavy or Tractor Trailer
- All Other Freight & Material Movers, Hand
  - Freight, Stock, & Material Movers, Hand
- All Helpers & Laborers
  - Hand Packers & Packagers

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

YAVAPAI COUNTY

	ESTIMATED MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1983-1987	JOB OPENINGS DUE TO SEPARATIONS 1983-1987	TOTAL JOB OPENINGS 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	93	113	20	11	31
Marketing, Advertising, & Public Rel. Mgrs.	7	9	2	1	3
Industrial Production Managers	11	14	3	1	4
General Managers & Top Executives	49	58	9	6	15
All Other Managers & Administrators	26	32	6	3	9
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	134	160	26	10	36
All Management Support Workers	3	4	1	0	1
Purchasing Agents, Exc. Wholesale, Retail, & Farm	6	7	1	1	2
All Other Management Support Workers	3	3	0	0	0
Electrical & Electronic Engineers	23	28	5	1	6
Industrial Engineers, Exc. Safety	5	6	1	0	1
Mechanical Engineers	17	21	4	1	5
All Other Engineers	1	1	0	0	0
Electrical/Electronic Engineering Technicians	22	27	5	1	6
Drafters	13	16	3	1	4
All Other Engineering & Related Technicians	5	5	0	0	0
All Physical Scientists	2	2	0	0	0
All Physical & Life Science Techs.	7	8	1	1	2
All Mathematical Scientists	2	3	1	0	1
All Teachers & Instructors	1	1	0	0	0
All Other Professional, Paraprofessional, & Technical Workers	24	28	4	4	8
SALES & RELATED OCCUPATIONS	39	48	9	5	14
All Sales Representatives & Salespersons, Service	2	2	0	0	0
Sales Representatives, Scientific & Related Products & Services, Exc. Retail	8	10	2	1	3
All Other Sales Representatives, Exc. Retail	12	15	3	2	5
All Other Sales & Related Workers	17	21	4	2	6
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	187	227	40	36	76
First Line Supers.-Clerical & Admin. Support	7	9	2	1	3
Secretaries	26	32	6	6	12
Bookkeeping, Accounting, & Auditing Clerks	16	19	3	3	6
Billing, Cost & Rate Clerks	6	7	1	1	2
General Office Clerks	40	48	8	9	17
Computer Operators, Exc. Peripheral Equipment	6	8	2	1	3
All Other Office Machine Operators	15	18	3	3	6
All Communication Equipment Operators	2	2	0	1	1
Production, Planning, & Expediting Clerks	26	32	6	6	12
Stock Clerks - Stockroom, Warehouse, or Yard	14	17	3	2	5
Traffic, Shipping, & Receiving Clerks	10	12	2	1	3
All Other Material Recording/Scheduling/Dist.	5	6	1	0	1
All Other Clerical & Administrative Support	14	17	3	2	5
SERVICE OCCUPATIONS	42	55	13	8	21
First Line Supers. & Mgrs./Supers. - Service	32	44	12	7	19
Janitors & Cleaners, Exc. Maids & Housekeeping	10	11	1	1	2
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	9	9	0	0	0
All Timber Cutting & Related Workers	8	8	0	0	0
All Other Agri., Forestry, Fishing, & Related	1	1	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	1,689	2,068	379	194	573
First Line Managers/Supervisors - Mechanics/Installers/Repairers	13	16	3	2	5
First Line Mgrs./Supers. - Production & Opers.	59	70	11	4	15
First Line Mgrs./Supers. - Laborers & Helpers	11	12	1	2	3
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	1	1	0	0	0
Production Inspectors, Testers, & Graders	35	41	6	4	10
All Other Inspectors, Testers, & Related	11	13	2	1	3

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

YAVAPAI COUNTY (CONTD.)

	ESTIMATED MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1983-1987	JOB OPENINGS DUE TO SEPARATIONS 1983-1987	TOTAL JOB OPENINGS 1983-1987
Machinery Maintenance Mechanics	16	21	5	2	7
All Other Machinery Maintenance Mechanics	4	4	0	0	0
Maintenance Repairers, General Utility	62	73	11	6	17
Precision Instrument Repairers	18	22	4	2	6
All Other Mechanics, Installers, & Repairers	19	22	3	1	4
All Construction Trades Workers	11	13	2	1	3
All Extraction Workers, Exc. Helpers	7	8	1	1	2
Tool & Die Makers	13	17	4	2	6
Machinists	42	52	10	5	15
All Other Precision Metal Workers	9	11	2	0	2
All Precision Woodworkers	5	6	1	0	1
All Precision Printing Workers	8	10	2	0	2
All Other Precision Workers	13	15	2	1	3
Lathe/Turning Machine Set-Up Operators - Metal & Plastic	23	28	5	3	8
Extruding/Drawing Machine Set-Up Operators - Metal & Plastic	26	35	9	3	12
Machine Forming Operators & Tenders - Metal & Plastic	155	210	55	19	74
Numerical Control Machine Tool Operators - Metal & Plastic	8	10	2	1	3
Plastic Molding & Casting Mach. Opers. & Tenders	63	72	9	9	18
All Other Metal & Plastic Mach. Set-Up Opers.	22	26	4	1	5
All Other Metal & Plastic Machine Operators	6	7	1	1	2
All Printing Press Set-Up Operators	5	6	1	1	2
All Printing Setters & Set-Up Opers.	1	1	0	0	0
Printing Press Machine Operators & Tenders	13	16	3	2	5
All Other Printing & Related Machine Opers.	1	1	0	0	0
Furnace, Kiln, Oven, Drier, or Kettle Opers.	23	27	4	3	7
Crushing, Grinding, & Mixing Machine Operators	17	20	3	2	5
All Other Machine Operators & Tenders	328	374	46	42	88
All Precision Assemblers, Metal	89	109	20	17	37
Electrical & Electronic Assemblers	20	24	4	2	6
Coil Winders, Tapers, & Finishers	7	9	2	1	3
Glaziers, Manufacturing	25	34	9	2	11
Welders & Cutters	8	10	2	1	3
Pressers, Hand	15	17	2	2	4
Assemblers/Fabricators - Exc. Machine, Electrical, & Precision	242	328	86	29	115
All Other Hand Workers	22	25	3	1	4
Truck Drivers, Heavy or Tractor Trailer	72	89	17	5	22
All Other Motor Vehicle Operators	14	17	3	1	4
Industrial Truck & Tractor Operators	23	27	4	2	6
All Other Material Moving Equipment Operators	8	9	1	0	1
Machine Feeders & Offbearers	12	14	2	1	3
Freight, Stock, & Material Movers, Hand	7	8	1	1	2
All Other Helpers & Laborers	77	88	11	8	19
TOTAL ALL OCCUPATIONS	2,193	2,680	487	264	751

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS
All Physical & Life Science Techs. Chemical Techs., Exc. Health	All Other Office Machine Operators Data Keyers, Composing
All Other Professional, Paraprofessional, & Technical Workers Reporters & Correspondents	

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

YAVAPAI COUNTY (CONTD.)

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

- All Other Inspectors, Testers, & Related
  - Precision Inspectors, Testers, & Graders

- All Other Mechanics, Installers, & Repairers
  - Mobile Heavy Equip. Mechanics, Exc. Engines

- All Construction Trades Workers
  - Electricians

- All Extraction Workers, Exc. Helpers
  - Extraction & Related Workers - Incl. Blasters

- All Precision Woodworkers
  - Cabinetmakers & Bench Carpenters

- All Other Precision Workers
  - Precision Molders/Casters, Exc. Jewelry & Foundry

- All Other Metal & Plastic Mach. Set-Up Opers.
  - Plastic Molding & Casting Machine Set-Up Opers.

- All Printing Press Set-Up Operators
  - Offset Litho. Press Setters & Set-Up Opers.

- All Other Machine Operators & Tenders
  - Sawing Machine Opertors & Tenders
  - Sewing Machine Operators, Garment
  - Cutting & Slicing Machine Operators & Tenders
  - Separating & Filtering Machine Operators
  - Packaging & Filling Machine Opers. & Tenders

- All Precision Assemblers, Metal
  - Electrical/Electronic Equipment Assemblers - Precision

- All Other Hand Workers
  - Machine Assemblers

- All Other Motor Vehicle Operators
  - Truck Drivers, Light - Incl. Delivery & Route

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

YUMA/LA PAZ COUNTIES

	ESTIMATED MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1983-1987	JOB OPENINGS DUE TO SEPARATIONS 1983-1987	TOTAL JOB OPENINGS 1983-1987
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	71	84	13	8	21
General Managers & Top Executives	60	72	12	8	20
All Other Managers & Administrators	11	12	1	0	1
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	75	89	14	9	23
All Financial Specialists	2	2	0	0	0
Purchasing Agents, Exc. Wholesale, Retail, & Farm	5	6	1	1	2
All Other Management Support Workers	2	2	0	0	0
All Engineers	32	38	6	2	8
All Teachers & Instructors	1	1	0	0	0
Reporters & Correspondents	5	6	1	1	2
All Other Professional, Paraprofessional, & Technical Workers	28	34	6	5	11
SALES & RELATED OCCUPATIONS	38	46	8	5	13
All Sales Representatives, Exc. Retail	32	39	7	5	12
All Other Sales & Related Workers	6	7	1	0	1
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	162	192	30	33	63
Secretaries	15	18	3	4	7
Interviewing Clerks, Exc. Personnel & Welfare	15	18	3	2	5
Bookkeeping, Accounting, & Auditing Clerks	11	13	2	2	4
Payroll & Timekeeping Clerks	5	6	1	1	2
General Office Clerks	16	19	3	4	7
Mail Machine Operators, Preparation & Handling	19	23	4	6	10
All Other Office Machine Operators	18	23	5	3	8
All Communication Equipment Operators	3	4	1	1	2
Traffic, Shipping, & Receiving Clerks	24	27	3	3	6
All Other Material Recording/Scheduling/Dist.	17	19	2	3	5
All Other Clerical & Administrative Support	19	22	3	4	7
SERVICE OCCUPATIONS	10	12	2	2	4
Janitors & Cleaners, Exc. Maids & Housekeeping	9	11	2	2	4
All Food Service Workers	1	1	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	1,274	1,461	187	145	332
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	8	9	1	1	2
First Line Mgrs./Supers. - Production & Opers.	29	34	5	2	7
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	2	2	0	0	0
Production Inspectors, Testers, & Graders	19	21	2	2	4
All Other Inspectors, Testers, & Related	3	4	1	0	1
Machinery Maintenance Mechanics	9	11	2	1	3
Machinery Maintenance Mechanics, Textiles	33	38	5	3	8
Machinery Maintenance Mechs., Sewing Machines	12	13	1	1	2
Maintenance Repairers, General Utility	8	9	1	1	2
Bus & Truck Mechs., & Diesel Eng. Specialists	6	7	1	1	2
All Other Mechanics, Installers, & Repairers	24	28	4	1	5
All Construction Trades Workers	5	6	1	0	1
All Precision Metal Workers	12	15	3	1	4
All Precision Woodworkers	5	6	1	0	1
All Precision Textile & Apparel Workers	4	4	0	0	0
Precision Compositors/Typesetters/Arrangers	6	7	1	1	2
All Other Precision Printing Workers	3	3	0	0	0
Food Batchmakers	8	10	2	1	3
All Other Precision Food & Tobacco Workers	8	10	2	1	3
All Other Precision Workers	1	1	0	0	0
Punching Machine Set-Up Operators - Metal & Plastic	9	11	2	1	3
All Other Metal & Plastic Mach. Set-Up Opers.	37	49	12	4	16
All Other Metal & Plastic Machine Operators	18	21	3	2	5

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

YUMA/LA PAZ COUNTIES (CONTD.)

	ESTIMATED MAY 1983 EMPLOYMENT	PROJECTED MAY 1987 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1983-1987	JOB OPENINGS DUE TO SEPARATIONS 1983-1987	TOTAL JOB OPENINGS 1983-1987
Letter Press Setters & Set-Up Operators	6	7	1	1	2
All Other Printing Press Set-Up Operators	1	1	0	0	0
All Other Printing Setters & Set-Up Opers.	7	8	1	0	1
All Other Printing & Related Machine Opers.	7	8	1	0	1
Textile Mach. Opers. - Winding/Weaving/Cutting	213	245	32	29	61
Sewing Machine Operators, Garment	380	419	39	51	90
Crushing, Grinding, & Mixing Machine Operators	5	6	1	1	2
Extruding, Forming, & Pressing Machine Opers.	29	33	4	3	7
All Other Machine Operators & Tenders	62	71	9	7	16
Electrical/Electronic Equipment Assemblers - Precision	20	24	4	4	8
Cutters & Trimmers, Hand	7	8	1	1	2
All Other Hand Workers	38	44	6	3	9
Truck Drivers, Heavy or Tractor Trailer	49	57	8	4	12
Truck Drivers, Light - Incl. Delivery & Route	19	23	4	1	5
Driving Sales Workers	14	17	3	1	4
Industrial Truck & Tractor Operators	6	7	1	0	1
Operating Engineers	20	23	3	2	5
All Other Material Moving Equipment Operators	1	1	0	0	0
Machine Feeders & Offbearers	17	20	3	2	5
Freight, Stock, & Material Movers, Hand	21	25	4	2	6
Hand Packers & Packagers	29	33	4	3	7
All Other Helpers & Laborers	54	62	8	6	14
TOTAL ALL OCCUPATIONS	1,630	1,884	254	202	456

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Engineers
Aeronautical and Astronautical Engineers

All Other Professional, Paraprofessional, & Technical Workers
Writers & Editors

SALES & RELATED OCCUPATIONS

All Other Sales & Related Workers
Salespersons, Retail

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Other Office Machine Operators
Data Entry Keyers, Exc. Composing

All Other Clerical & Administrative Support
Typists, Word Processing Equipment

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other Mechanics, Installers, & Repairers
Aircraft Mechanics
Aircraft Engine Specialists

All Construction Trades Workers
Concrete & Terrazzo Finishers

All Precision Metal Workers
Tool & Die Makers

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING (CONTD.)

All Precision Woodworkers
Cabinetmakers & Bench Carpenters

All Other Precision Food & Tobacco Workers
Slaughterers & Butchers

All Other Metal & Plastic Mach. Set-Up Opers.
Press/Press Brake Machine Set-Up Operators - Metal & Plastic
Welding Machine Setters & Set-Up Operators

All Other Metal & Plastic Machine Operators
Machine Forming Operators & Tenders - Metal & Plastic

All Other Printing Setters & Set-Up Opers.
Photoengraving & Lithographing Photographers

All Other Machine Operators & Tenders
Sewing Machine Operators, Non-Garment
Cutting & Slicing Machine Operators & Tenders
Separating & Filtering Machine Operators
Packaging & Filling Machine Opers. & Tenders

All Other Hand Workers
Assemblers/Fabricators - Exc. Machine, Electrical & Precision

METHODOLOGY

Sample Selection and Response Rate

Occupational estimates for the manufacturing industry were developed from a survey of employers in the state. Employers asked to participate in the survey were selected, using standardized sampling techniques, from a master employer file of firms doing business in Arizona. A sample of establishments employing 4-99 employees and all establishments having 100 or more employees were surveyed. The entire sample was composed of 1,860 units with a usable response rate of 93 percent. Firms responding represented 96 percent of the industry's employment.

Employment Projections

Projecting occupational employment and demand is accomplished in two basic stages. First, total manufacturing employment is estimated for the target years. These forecasts are computed using an econometric model driven by forecast values for variables such as national unemployment, interest rates, and industrial production. Staffing pattern ratios, as determined by the OES survey, are then applied to the industry employment projections and represents the second stage of the forecasting methodology.

Employment data reflects full or part-time workers, workers on paid leave, and workers on unpaid short-term absences, e.g., sick leave, temporary layoff, and jury duty. Also included are salaried officers, executives, and staff of incorporated firms. Workers performing tasks related to two or more occupations are classified according to their highest level of skill.

Job Openings

"Total Job Openings" represents the sum of openings resulting from expansion and replacement during the projection period. Expansion is the numerical difference in employment for a given period. Replacement represents job openings that transpire due to separations from the labor force, i.e., death, retirement, and pregnancy, and is based on national occupational separation rates.[1] The "Total Job Openings" column does not include labor turnover, i.e., openings created when a worker changes jobs, leaving the job to be filled by someone else. These vacancies are generally the largest source of job openings.

Limitations of the Data

The projection method does not account for cyclical, seasonal, and such external factors as sudden discontinuations or initiations of major government programs.

Employment forecasts for the nonmetropolitan counties are based on growth rates developed for the "balance of state" (Arizona less Maricopa and Pima counties) rather than for individual counties.

---

[1] "Tomorrow's Manpower Needs," Supplement No. 4, BLS, 1974, pp. 11-16.

LABOR MARKET INFORMATION PUBLICATIONS
OCCUPATIONAL EMPLOYMENT STATISTICS
BOX 6123, SITE CODE 733A
PHOENIX, ARIZONA 85005

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
EMPLOYMENT SECURITY MAIL
LAB 441

FIRST CLASS MAIL

Cheryl Waldman
Congressional Infor. Service
4520 East-West Highway
Bethesda, Maryland 20814

Reproduction of this publication for commercial use is prohibited by Section 39-121 Arizona Revised Statutes. Permission to reprint this publication, or parts of it, for nonprofit use may be granted upon written request, if credit will be given citing this publication and the Arizona Department of Economic Security.

This periodical is issued and printed by the Arizona Department of Economic Security as authorized by the Wagner-Peyser Act and is paid out of federal funds granted by the U.S. Department of Labor.

If you do NOT desire to continue receiving this publication, please check here ☐ and return this cover to address below.

If your address has changed, please indicate change and return this cover to the address below.